THE NEW ENGLAND FARMER

DEVOTED TO AGRICULTURE, HORTICULTURE, AND KINDRED ARTS.

NEW SERIES. Boston, October, 1868. VOL. II.---NO. 10.

R. P. EATON & CO., PUBLISHERS, OFFICE, 34 MERCHANTS' ROW. MONTHLY. SIMON BROWN, S. FLETCHER, } EDITORS.

SOCIAL INFLUENCES.

OCTOBER is the pioneer of Winter with us here in New England. It admonishes us of the advancing forces that are to possess the land. It gives us a foretaste of the short days and long evenings, which it is as much our duty to improve as it was to make hay when the sun shone. During the busy season we have little time for social gatherings, neighborhood visits, or mental improvement, and there is danger that the habit thus formed will follow us into the more leisure season of winter. Probably no class of American citizens neglect social and intellectual intercourse to so great a degree as do farmers in the more sparsely settled portions of our country. This tendency to individual or family isolation should be carefully guarded against. Men are, by their very constitution, social beings. Instinct draws them together. Their natural condition is that of society. In social life man finds his most rapid and complete development. The life of the hermit is an unnatural life. The mind of the solitary is always narrow and contracted. His faculties become enfeebled, and his intellect dwarfed.

It is only in society that the faculties, moral and intellectual, can have full play. Those who have tastes, interests or pursuits in common, naturally associate together. Thought suggests thought. The mind is quickened, and men learn to observe and reason. Ideas, perhaps crude and indefinite, are thrown out, discussed, compared, and assume definite form and shape, and become principles and rules of action. An idea originating in one mind, becomes common property, and is added to the available stock of knowledge in the community. But not only are the intellectual powers and resources increased by social intercourse, but the taste and the manners are improved, kindly feelings are called out and strengthened, and the heart and the life are made better by it.

We have been led into this train of remark by observing the effects of Farmers' Clubs, and other associations for mutual improvement and assistance. We do not refer particularly to increase of agricultural knowledge or improvement in agriculture among the members, but to their intellectual, moral and social improvement. Young men who had never been accustomed to write, or to speak in public, in a short time have become able to

do both in such a way as to interest others, and do much credit to themselves. We have often listened to essays in a Farmers' Club, by hard working farmers, that were worthy of a place in any of our agricultural journals. Young men learn to preside in meetings, and conduct them in an orderly way,—an accomplishment of no small value. Improvement in manners, and in the courtesies of life and language, that results from such associations is in many cases strongly marked.

An impulse is given to individual effort,—a desire for knowledge is awakened, and new sources of knowledge are sought out. Men read for a purpose, and with a keener perception of truth. They comprehend better what they read and distinguish more readily the true and the practical, from the false, and the impracticable. They learn to have opinions of their own, and to defend them with substantial reasons, and that, too, in the use of intelligible and courteous language.

The Good Templars' Lodges, in which thousands of young men and women meet weekly, primarily to promote the cause of temperance, and secondarily to strengthen each other's hands in every virtuous work, and in which mutual improvement in literature, music and science are not neglected, and social intercourse is cultivated cannot fail to exert a refining and elevating influence upon all who belong to them. Not only will the principles and habits of temperance be promoted and strengthened, but purity of life and language will be promoted as well. Coarseness and vulgarity will be avoided and become distasteful. Kind feelings and mutual confidence will be increased. Habits of forbearance and charity will be formed which will carry with them an abundant reward. Persons from different stations in society are thus brought into more intimate relations, and learn to understand each other better, and to have more regard for each other. The reflex influences from such associations, to say nothing of their primary objects, richly repay the time and efforts of those who unite in them.

To all such social enterprises, especially to those in which the ladies unite, we are always ready to say "God speed." Their effects cannot be otherwise than good. Even if they do not effect much for the objects for which they are ostensibly established, they indirectly accomplish much for the benefit of the individuals engaged in them.

But such organizations are more likely to do something effectively to advance their leading object than occasional meetings of the same parties for the same objects. The latter are held together by looser bonds, and feel less responsibility, and act occasionally, and spasmodically. But the frequent and regular meetings of well organized associations, in which work is assigned to each and all the members in their turn, who are held to their duties and obligations, uniformly prove more efficient instrumentalities for promoting any good object. Steady work applied to the promotion of any good cause and enlivened by the exercise and cultivation of the social affections, are among the best means of advancing the good of both society and individuals.

USE OF SAND FOR BEDDING STOCK.

It has become quite common among farmers to use sand as a bedding for their animals. It is spread each day upon the floors and cleaned away with the droppings of the stock on the next day.

Two reasons are urged to sustain this practice:—first, to secure a softer bedding than the bare planks, and, second, to absorb the liquids that fall into it.

Not much thought has, probably, been given to either of these reasons. It certainly is true that is makes a softer bed than the planks, but it is very doubtful whether it makes a *warmer* one. On this point there are some excellent statements in a late number of the *Country Gentleman*, which we give below:—

There is in one of your late numbers a description of a pattern farmer, and among other things it is said of him that he is the first farmer in Eastern Massachusetts that introduced sand as bedding for stock. Sand has been used for bedding a long time in the section I live in, and the longer it is used the less it is liked. Sand is a very cold article. There is nothing colder, and being very soft, the animal sinks deep into it, thereby bringing a large part of the surface of its body in contact with this cold substance. The writer of this has seen it tried in the case of horses with almost ruinous consequences, and therefore concludes that if it is absolutely ruinous to horses that are worked, it cannot possibly be a very good thing for neat stock, though of course they feel its effects in a much less degree.

Suppose a horse has been on the road all day, hauling timber from the woods, and comes in at night somewhat fatigued and thoroughly warmed throughout the whole system. After

eating his evening meal he lies down upon a bed of sand an inch thick, in order to relax all his muscles and give them rest. What follows? If you recollect how rapidly the heat is abstracted from your hand when you take hold of a piece of iron or marble in a cold day, you can not doubt what follows. The sand is much like the marble or iron, and as is said above, "is a very cold article." The operation that then goes on, is, for the animal to communicate its heat to those portions of the sand which come in contact with its body, and the sand passes it along from particle to particle, in some measure, still farther off. This process goes on until the outside temperature of the animal and the sand are the same. Instead of communicating heat it abstracts it, and that in no small degree.

The second reason for using it is, to absorb the liquid droppings and prevent their being wasted. It does prevent their running off in some measure, but probably not much as an absorbent. Sand has little or nothing of the property of peat to *absorb* liquids; but its particles being small and coming close together, prevent liquids from flowing away with any facility, and being aided by the vegetable portions of the manure these are held back and preserved. This is better than nothing, and where it is used as a top dressing on low lands has a decided and permanent effect in improving them. For all uplands, however, with the exception of those which are quite clayey, one cord of good peat would be worth more than many cords of sand. Next to charcoal, peat has the largest absorbing power of any substance which is at the command of the farmer in any considerable degree. Even on high, rich loams, it will produce the happiest results when properly prepared and applied,—and on sandy land it will work a complete revolution.

In hot weather, we can see no objection to the use of sand as bedding, for animals not heated by labor.

CATTLE DISEASE IN ILLINOIS.

The Champlain County, Ill., correspondent, (B. F. J.) of the *Country Gentleman*, writing Sept. 2, says that the important fact of the report of Mr. Ranch, principal Health Officer of Chicago, who has the official charge of the sanitary condition of the Union cattle yards at Chicago, is that any and all sick and infested cattle *may* and *do* infect other cattle. He also states that the "Canadian Commission" sent to Illinois to report on the cattle disease, were not long about their investigations, and went home, as he learns, convinced that the Spanish fever (so-called) is really the true *rinderpest*. He says:—

> Cattle continue to die, and it is now generally believed that sick native cattle will infect healthy native cattle. I have a valuable cow at home which has never been exposed, and I am now so convinced that she might take the disease from sick native cattle, that I would not trust her six hours on the street or public road for half her value. I am told by physicians of character and standing, that *post mortem* examinations reveal the fact that there is *violent* inflammation and extensive lesions of the *duodenum*, in every death following the prevailing disease. This is the prime pathological fact; other organs are more or less affected, but the *duodenum* always and distinctively. Therefore our physicians conclude that the disease showing a parallel development, it probably has an origin not unlike that of typhoid fever, and that its treatment should be in a manner similar to the treatment of that disease. The losses will, I am convinced, be equal to the highest estimate I have made, viz.: 150,000 head of cattle; those of Champaign county threaten to amount to half a million of dollars.

Diseases so often change their character or type on change of location and other circumstances that we have feared some new developments of this Spanish fever. We are not prepared, however, to endorse the conclusion of the Canada commission, and hope that the fears expressed by the writer as to native cattle transmitting the disease will prove groundless.

REPORT OF THE WHEAT CROP.

A gentleman in this city deeply interested in all that relates to our industrial advancement and prosperity, wishes us to suggest to the different postmasters throughout our State, that they collect from the farmers in their own towns the amount of wheat each has raised the present season, and send the same to us that it may be published in our columns. The plan strikes us as one that can be satisfactorily accomplished without much effort, and we hope farmers will endeavor to tell their postmaster, when calling for their paper, how much wheat they have grown the present season, and are sure they will gladly send it to us for publication. What town shall be first to report?

We copy the above from the *Maine Farmer*. The thought is a good one, and we hope the farmers of that State will give attention to it. A similar course in our own State would prove of value, and we hope to receive returns from all parts of the State, or from any of the New England States.

Our old and steadfast friend, HENRY POOR, Esq., of New York, in speaking of the cul-

ture of wheat in New England, says:—"We look to the agricultural press to enforce and complete this wofully neglected branch in New England farming. The New England States are not long to remain the workshops of this country. Material genius and skill are scattered broad and wide through this diversified land, and are being daily developed. Cotton and woolen machinery, and all the arts applicable to the wants of man, are not to be confined within the borders of our little loved New England. Hence the *home farm*, with *better cultivation and less acres in tillage* may grow every cereal and vegetable for the wants of the people—saving their millions and millions of dollars in corn and wheat, and at once become independent of West and South for for their bread. They must allow their forests to increase, so valuable, so useful, so beautiful; not wantonly burn and destroy them for the sake of clearing another piece of land to raise "a patch of rye"—where, perchance, a railroad may pass through and a village spring up, doubling and quadrupling the value of the whole township.

Reduce the cultivation one-half,—get the product of four acres from *two*,—save the great expense of *labor*, and the farmers will begin to learn an alphabet they have been unfamiliar with heretofore."

For the New England Farmer.

THE GARDEN IN OCTOBER.

Generally, throughout the New England States, the growing season for vegetables has come to an end, and little remains to be done in the garden except to gather and preserve the ripened crops, clearing up, making provision for future operations, &c. As severe frosts often occur during the month, it is unsafe to leave vegetables of any kind in the ground, or otherways exposed. As fast as the crops are removed, clear the ground of weeds or other rubbish, and add all suitable material to the compost heap; burn all others, and dig over the soil to remain exposed to the beneficial effects of frosts during winter.

Generally, among farmers, there is too much neglect of little things, which might be done at comparatively leisure times during the fall and early winter, thinking that spring is soon enough for all such work. When spring comes, there is the oat ground to plough and sow, and a multiplicity of other work to be done, and the garden not being cleared or prepared to be manured and ploughed, is frequently left for a convenient time, till many of the advantages of an earlier spring start are lost. The great advantage of a good garden is its earliness, furnishing a variety of salads, greens, vegetables, &c., early in the spring, when the appetite craves a change from winter food.

Asparagus.—Now is the time to make new beds, rather than to wait till spring. Spade up the ground, at least two spits deep,—better deeper,—working in a plenty of good lasting manure the whole depth. A sprinkling of salt throughout the soil of the bed will be beneficial. Plant two-year-old, or very strong one-year-old roots, a foot apart each way, covering the crowns four inches deep with good fine soil, then cover with three or four inches of coarse manure, for winter protection.

Beets.—If any remain in the ground, pull and twist off the tops, and after drying put them in the cellar, packing them in sand or dry loam in barrels or boxes, to keep fresh for winter use.

Cabbage and Cauliflower.—Sometimes these may be safely left till the last of the month, or even into November, but where they have completed their growth it is better to harvest at once, as they are apt to crack, and the heads decay. Young plants, for early spring planting may be set in cold frames to be wintered over.

Carrots.—Pull, top, and after drying, store in the cellar, packed in sand, as advised for beets, before freezing weather, as a light freeze injures them very materially.

Celery.—Continue earthing up, on clear days, after the dew is off and the plants and ground are dry. Use care not to let any soil fall between the stems or leaves, as it will cause them to rust and spoil.

Cold Frames.—Put them in readiness for wintering cabbage, cauliflower, lettuce, &c., for winter and early spring use, and planting.

Currants and Gooseberries.—Make cuttings, where desirable, before hard freezes, prune and thin, if not before attended to. Transplant, dividing old bunches, and set the younger shoots. Plant in rows, five feet apart, and three feet apart in the row. They do better set where they can be worked all around freely, instead of setting close beside a fence. The currant pays for *good* culture as well as any fruit we have.

Grapes.—Gather as they ripen, handling carefully not to bruise, or rub off the bloom. For winter keeping it is better to let them hang on the vines as long as safe from frost, or other accidents, and as you gather cut out all defective berries. A variety of ways are recommended for keeping them fresh, but whatever plan is pursued they should be kept at an even temperature, where they will not gather moisture, and in the dark.

Lettuce.—Late sown may be transplanted into cold frames, for winter use; or seed may be sown in the cold frame for wintering over and early spring transplanting.

Parsnips.—Dig and top what may be de-

sired for winter use, and preserve in the cellar, packed in sand or soil, as directed for beets. As frosts rather improve than injure the parsnip, it is better to let the main crop remain in the ground till spring, and then dig before they begin to grow.

SEEDS.—Select the best, as they ripen, and after well drying store them away in labelled paper bags, boxes, &c., in a dry, cool place.

TURNIPS.—Store, feed or market early varieties. Rutabagas and other late kinds will grow as long as the ground remains open, but should be harvested in season to prevent being caught by the freezing of the ground.

TRENCHING.—This is important, when properly done, and this month, or any time before the ground freezes up for winter, is a good time to do it. It is seldom advisable to turn the upper soil down and bury it with a mass of cold, comparatively barren earth, but the loosening up and mixing in of manure with the subsoil, to the depth of two feet or more, and bringing a small portion up, works advantageously, often renewing an exhausted surface soil; and the deep working furnishes a greater range for the roots of plants, from which to draw their food, while the soil thus worked is less liable to be injuriously affected by either drought or wet, the loosened earth acting similar to a sponge in absorbing, holding and imparting moisture as demanded by vegetation. W. H. WHITE.

South Windsor, Conn., Sept., 1868.

IMPROVEMENT OF LAND WITH SHEEP.—Mr. Nathaniel P. Atkinson, who was doing business in Montreal in 1812, being an alien, was ordered out of the country on the declaration of war between the United States and Great Britain. On leaving he went directly to Washington City, where he paid $180.80 for 52 Spanish sheep, which had just been imported. He put them on a farm in Elm Grove, West Virginia, where he has remained ever since—some 56 years—engaged with good success in raising fine wool, In a communication to the *Planter and Farmer* he says:—"With sheep and clover I can make any land productive, unless it has the barrenness of the sands of Sahara."

—The *Utica Herald* complains that the public are kept in ignorance of what the State Commission for the investigation of the causes of abortion in the cows of the dairies of central New York are doing, and calls upon the New York State Agricultural Society, which has the custody of $5000 appropriated by the last Legislature, to show what is being done with the money and what progress is being made in this very important work.

EXTRACTS AND REPLIES.

STUMP EXTRACTOR AND WALL BUILDER.

The above apparatus, manufactured by Messrs. Packer & Fish, Mystic River, Conn., is an ingenious and exceedingly effective combination of mechanical powers, by which an immense force can be exerted in taking out stumps and rocks. With a single yoke of cattle, rocks weighing five tons and upward are lifted from their bed without any digging around them. The arrangement is such that after being taken out they are easily transported by the same team without change from the carriage, and deposited upon the wall or elsewhere in the position wanted. In this way masses can be handled which otherwise could not be made available without great expense. The price of the machine can be realized in a few days by the saving of labor, where there is even a moderate amount of this work to be done. One should be owned at least in every neighborhood where fields need clearing. It would pay well for a party to own an apparatus and clear land by contract. Full particulars as to prices, &c., can be had by addressing the patentees as above.

WHITE SPECKS IN BUTTER.

I have read with interest the articles about white specks in butter, and I fully agree with Mrs. M. E. C. and Mrs. S. S. Pearce, spoken of in the FARMER, of July 4, that it is caused by the cream standing too long. The milk that settles in the bottom of the dish sours, and a part turns to whey, and a part becomes hard like cheese-curd. In hot weather I churn every other day, and avoid the trouble. But if it so happens "that I go a visiting to-day and churn to-morrow," and thereby get white specks in my butter, I wash it in cold water, working it well with a paddle; it don't hurt the butter, although I don't wash it at other times.

I think that S., of August 22, is right about striped butter, and that she is a careful dairywoman, and churns often, for she don't seem to know what speckled butter is. R. H.

Kent County, R. I., Sept. 8, 1868.

SINGULAR DEATH OF A COW.

Last Sunday morning while one of my neighbors was looking at his cows which were feeding as usual, one of them threw up its head and commenced to roar as cattle sometimes will at the smell of blood. The creature soon commenced moving around in a circle of some five rods in diameter, which she continued for three hours, when she fell down apparently exhausted and died. The verdict of some neighbors who made an examination of the animal was that "she died of horn all

on the brain." If this disease is common in any part of the country, we shall be very much obliged for any information as to its cause and cure.

East Jay, Me., Aug. 26, 1868. JACK.

REMARKS.—All parts of the animal are subject to disease,—the brain, heart, and other "vital parts," as well as the bones, flesh and skin. The veterinary books recognize several distinct diseases of the brain. One is called *entozoic*. This is caused by a minute animal, similar to worms in the intestines, eye, &c. Dr. Dadd says those which infest the brain consist of a parent sac, or membranous tunic, from which, externally, germination takes place. The symptoms of disease produced by these parasites is described as follows in his *Diseases of Animals*:—

In their early state, they take up but little room, and do not occasion any very marked symptoms; yet, if the animal could only speak, we might be informed that it was the subject of headache. As the parasite or parasites increase in size, they produce pressure on the brain, which makes the animal appear giddy, confused, nervous, and desirous of separating itself from the herd; and it is in consequence of these peculiar symptoms making their appearance, when no other form of disease is present, that the term sturdy is applied, which is simply used to denote the presence of cerebral parasites.

When once these parasites have fairly taken up their abode in the cranial cavity of an ox, I fear there is very little help. I recommend prevention rather than attempts at cure. The preventive remedies are as follows: Salt, sulphur and charcoal, equal parts. This is a specific for all parasites. About a table-spoonful of the mixture, given occasionally in the food, will prevent the germination of many forms of parasites.

In relation to another form of disease called inflammation of the brain, the Dr. says:—

The affection is generally sudden in its attack, and is often accompanied by symptoms of phrensy, and the animal sometimes becomes frantic, and decidedly mischievous; soon however, alterations in the structure of the parts take place, as softening, effusion, etc., and then the animal dies.

In regard to the treatment, I must confess that it is much easier to write about it than accomplish it. In cases when delirious fits occur, accompanied by convulsions, which make it dangerous to approach the animal, I have no remedies to offer; the case is beyond the reach of art. I may, however, add, that the terminations of this disease are different. They depend on the intensity of the malady, and the structural susceptibility.

The disease is generally treated with a view of counteracting inflammation: cold water to the head, active cathartics, and counter irritation on the region of the spine. The causes of a disease of this character are often obscure, yet I have known it to occur as the effect of prior disorder in some other part of the body. I examined the carcase of an ox, a short time ago, that died of what the owner termed "*mad staggers*." I found the brain highly congested, and several adhesions between it and its membranes; there were also large patches, intensely red, on the lining membrane of the third and fourth apartments of the stomach. I was informed by the owner that the animal died twenty-four hours from the time of its first attack. The disease probably originated on the digestive surfaces, in consequence of the irritating nature of the food—mouldy hay and tough cornstalks, with a sprinkling of damaged meal and brewer's grains.

The symptoms of symptomatic disease of the brain are as follows: dullness, loss of appetite, staring of the coat; and, if the animal be a milch cow, diminution in the quantity of milk is observed; the extremities are cold, and the animal grates its teeth. The respiration is at first tranquil, and the pulse slow but full. The patient will frequently be seized with a kind of epileptic fit, which lasts but for a few minutes, during which time some of them will exhibit the most violent symptoms, such as bellowing hideously, pawing the earth, and running at anything within their reach; they will also break out into profuse perspiration, and press their heads forcibly against the wall, even to such an extent as to break off their horns. Many are seized with violent tremblings and twitchings, and towards the latter period of the disease, the respiration becomes extremely laborious, the jaws are firmly closed, convulsions succeed each other rapidly, and death shortly closes the scene.

Treatment.—In the early stages of this affection, the animal should be drenched with the following:

Linseed Oil	4 ounces.
Lime Water	4 ounces.
Powdered Ginger	4 drachms. Mix.

The rectum is to be emptied, by means of clysters composed of salt and warm water, and the whole length of the spine should be rubbed twice daily with a portion of the following:

Linseed Oil	1 pint.
Spirits of Hartshorn	2 ounces. Mix.

Should the animal improve, a few doses of the following will complete the cure:

Powdered Goldenseal	2 ounces.
Carbonate of Soda	1 ounce. Mix.

Divide the mass into six parts, and give one night and morning, in a pint of cold water.

From the foregoing, our correspondent will see that his description of the symptoms in the case of his neighbor's cow, and of the examination after death, are hardly sufficient to enable any one to decide upon the specific character of the disease which resulted in the apparently sudden death of the animal.

THE JAPANESE WHEAT, A MILLET.

I send you a stalk of (so called) "Japanese Wheat," from seed received from Mr. J. D. Rice. The seed was sown about the first of June, and when I wrote you, June 27, I had seen no signs of vegetation. July 10 it began to come up, and I have a luxurious growth, as per sample, which I enclose. Now, what is it?

The yield of seed is abundant, as you can see,

although cut before matured, and I should judge the straw to be equal to four tons per acre or more; but it seems so hard or woody that it cannot be worth much to feed.

I give this information to correct any impressions which may have been formed in consequence of my former statement injurious to Mr. Rice.

Montpelier, Vt., Aug. 28, 1868. A. D. ARMS.

REMARKS.—The sample sent is quite different from the Hungarian millet which has been disseminated by the Agricultural Department. Mr. C. L. Flint, Secretary of the Board of Agriculture of Massachusetts, to whom we showed the "Japanese Wheat," thinks it is a variety of the millet known as the "Italian." The general term millet is applied to a large number of seed bearing plants, and includes, we believe, broom corn, and the "sorghums," or Chinese and Italian Sugar Canes, as well as many smaller varieties used as forage plants.

The stalk of Mr. Arm's sample, including the seed head, is about four and a half feet in length, and must be hard fodder. The head is over ten inches in length, and is a compact cluster of little bunches, or sub-heads, of seeds, yielding many thousand fold. It has somewhat the appearance of barn-grass. Mr. Joseph Breck who examined this specimen remarked that he has seen a variety cultivated, that in rich land would grow twelve feet high. The seeds were fed to poultry, but the other portions of the plant were of little value.

MANURING MOWING LAND BY SHEEP.

I am following my new plan of top dressing. This season, I began July 29th, and have already gone over half an acre thoroughly. The sheep are becoming tamer and more easily managed, as they are used for this purpose. It has been objected that this plan robs the pasture. But as our sheep lie in the pasture night and day during May, June, and July, and are there now all day, I think the pasture gets its share of their droppings, all in fact that is needed to keep them from running out for want of manure. The fact is our pastures are bound out by manure, brakes and thistles, and the only way to improve them is by ploughing. Did you ever know of any one ploughing up an old pasture and having to manure it the first year for a crop? We all know that such land yields big potatoes, corn, oats or anything. If any one doubts the policy of this plan, I will invite them to call and see for themselves the first of July next.

I have a new kind of fence or hurdle, which I think is an improvement on that previously used, and which was described in the FARMER of July 11th. I now use three boards four inches wide, with end and centre posts one and one-half by two inches, with two braces three inches wide, meeting at the top from each lower corner of the panel.

Braintree, Vt., Aug. 24, 1868. H. H. C.

YOUNG TURKEYS DYING OFF.

I wish you would ask your subscribers if they can tell me what it is that makes my young turkeys die off? I tried to find out last year through your paper, but could not get anything satisfactory. I had thirty-five the first of August that came out June 1st, and they have died about one a week since. They are about one-third grown. The first I notice is, that one looks dull and keeps two or three rods behind the flock, eats but little and continues to grow more dumpish, and about the third day he dies. I examined the last one and found he appeared all right, except he had yellow spots on his liver. I wish you would get a little information on this subject if you can.

Shrewsbury, Mass., Sept., 1868. G. E. H.

REMARKS.—We trust that some of the turkey-raisers of New England will give "G. E. H." information on this subject that will enable him to save the remainder of his flock. The information will be valuable to thousands of others as well as to him. Mr. N. B. Butler, of Hamilton, has skill and great experience in turkey-raising; perhaps he can throw light upon the matter.

The books which we have consulted give no clue to the difficulty which you mention, and nothing in our own pretty large experience enables us to throw light upon it. If they ramble in wet grass early in the morning, or continue to do so late enough in the evening to go to roost with wet feathers, we should be inclined to impute their sickness to that cause. Look carefully about to ascertain whether they have access to any food which would be injurious to them.

DROUGHT IN NORTHERN VERMONT.—THE POTATO CROP, &C.

We are still suffering from the effects of the most protracted drought ever experienced in Northern Vermont. In fifteen miles north we see no water near the highway; our wells and springs are nearly all dry, and our fields look scorched on dry soils. I noticed in a late *New York Tribune* the statement, that potatoes in Vermont were a three-fourths crop; in this vicinity ordinary early, and late, varieties will not now average over fifty bushels to the acre, and without rain they will make little, and in some districts, no improvement. On four adjoining farms we are growing the "Early Rose," and its extreme *earliness* and productiveness have given us a large yield. In the same fields, and with similar culture, the ordinary varieties have failed. I have already harvested forty bushels from twenty pounds planted, and think other plots in the vicinity will yield still better. About the 10th of July I found some of the "Rose" sprouting in the hills, and having time to mature another crop, I tried every conceivable plan to make the newly sprouted potato grow and produce. My experiments proved an entire failure.

What are the conditions necessary to the growth of new potatoes? If only age and maturity are necessary, why is it that half-grown potatoes sprout as early in the cellar as mature ones? How soon can they be grown after harvest?

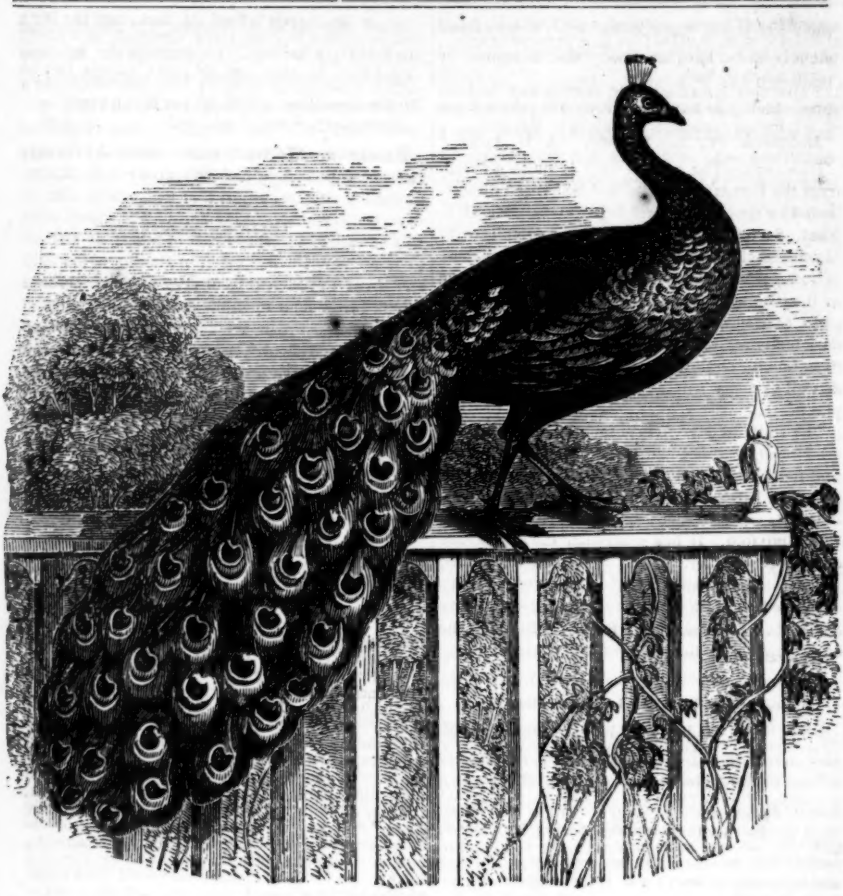
O. C. WAIT.

West Georgia, Vt., Sept. 1, 1868.

SWEET FERN FOR IVY POISONING.

As the plant recommended by your Maine correspondent for the cure of ivy poison may not be known, or within the reach of all who may get poisoned, I will say that a wash made by steeping sweet fern leaves, has been used in my family and neighborhood for many years with entire satisfaction. It should be applied as soon after the disagreeable effects of the poison are felt as possible, and I have never known a few applications to fail of effecting a speedy cure. S. M. CASWELL.

Fitchburg, Mass., Aug. 24, 1868.



THE PEACOCK.

"Handsome is that handsome does," is an old proverb that did not probably originate in the Peacock family. With an outward beauty to challenge admiration, they are said to be vicious gluttons, relishing young chickens, ducks, and goslings, full as well as grubs and worms. Indeed they have been charged with having "the plumage of an angel, the voice of a devil, and the stomach of a thief." But they are good-looking, therefore,

"How rich the peacock! what bright glories run
From plume to plume, and vary in the sun!
He proudly spreads them to the golden ray,
Gives all his colors, and adorns the day;
With conscious state the spacious round displays,
And slowly moves around, a waving blaze."

This most magnificent and beautiful of all the feathered race, says Mr. Bement, is supposed to have been originally a native of India; but they have long been introduced into Europe and this country as ornaments to the mansions of gentlemen farmers. Peacocks are said to be at present found in a state of freedom upon the islands of Java and Ceylon. The earliest mention we can trace of the peacock is in the Book of Job. The history of King Solomon is an evidence of the antiquity of the peacock, and also the choice of the goddess Juno, who selected this for her favorite bird, from its gorgeous and brilliant plumage and majesty of demeanor. It is asserted by the ancient writers that the first peacock was honored with a public exhibition at Athens; the rumor of the arrival spread all over Greece; from distant parts the rich and the noble took

their journey to the classical city, to pay handsomely to be spectators of that beautiful phenomenon and wonderful paragon of the feathered race. Going to look at the peacock was not only an expensive, but an aristocratical entertainment. Peacocks are not worth the attention of the farmer on the score of profit, but as they perch of the tops of buildings, &c., may save watch-dogs.

FOUL ROAD-SIDES.

So long ago as 1855, a committee of the Jefferson County Agricultural Society, N. Y., made the following remark in a report to the Society:—

"The uniform neglect of overseers of highways to see that the laws be faithfully executed relative to the destruction of noxious weeds upon our roads, makes it incumbent upon those owning lands through which they pass, to perform this duty."

We know not that we have in this State any law making it the duty of highway surveyors to root up and destroy Canada thistles, wild cherry trees, and other noxious weeds and plants, which spring up on our roadsides; but such an addition might be made to the law, specifying the duties of such surveyors, and we think public opinion would enforce its execution. We would, therefore, respectfully call the attention of the Agricultural Committee of the Legislature to the subject. Such a law faithfully executed, would be of great advantage to the farms and orchards over the whole Commonwealth. Such nuisances are found in almost every town to a greater or less extent, and might be easily removed by the surveyors at very little expense. Not only would breeding places of destructive insects be thus removed, but the appearance of the highways would in many instances be much improved. Many farmers now attend to this matter, and the traveller may determine the extent of their farms on the road, by the clean and neat appearance of the road-side border. But perhaps on the very next farm these nuisances are allowed to intrude themselves. This is very discouraging to those who have taken pains to free their own farms from them. Were attention paid to this subject it would lead to better habits with respect to other incumbrances that are now too apt to be allowed to accumulate by the sides of the highways, such as stones, logs, brush and decayed lumber. When farmers have once acquired the habit of keeping the streets clean and neat, and begin to take pride in their good appearance, they will naturally look to the condition of their yards and the surroundings of their dwellings, and a general clearing up of old lumber, stumps, broken wheels and decaying sleds would take place, which would not only improve the appearance of many farms, but would add to their market value.

Until it is made the imperative duty of surveyors to attend to this, it is important that every farmer should attend to the roads that pass by or through his own farm.

THE LARGEST FLEECE OF WOOL.

Among five fleeces of wool which were shorn and cleansed under the auspices of the Union Wool Growers' Association of Ontario and Livingston Counties, N. Y., last spring, that of a three-year-old Merino Ram belonging to J. C. Short of Livonia, was reported as weighing 24 lbs. and 2 ounces, when taken off—the growth of 11 months and 21 days, and when scoured 9 lbs. and 3 oz. This being about one pound heavier than that of any scoured fleece on record, much doubt was expressed as to the correctness of all the statements. Dr. Randall having obtained the affidavits of weighers, scourers, and of neighbors acquainted with the parties, expresses the opinion, in the *Rural New Yorker*, that there can be no reasonable doubt that all the parties connected with this scouring test acted in good faith throughout. He says:—

The only possible loop-hole we can see for an error, is in respect to the perfectness of the scouring. That Mather & Sons scoured the wool as well as they usually do for their "manufacturing purposes," we entertain no doubt, and probably of the two, better, as they say they took "particular pains." We are not familiar with their mode of scouring or its results. But we do not know why it is not a thorough one. If it is not, the fact can and ought to be shown. If any expert questions the proper cleanliness of the wool, he, as we have already said, can have the opportunity of examining a specimen of it, which we have in our possession. We use the qualifying word "proper" avisedly. No wool is scoured absolutely clean by manufacturers It is scoured only as clean as utility requires in the manufactures to which it is applied,—and this in the case of "fine cloths," &c., is approximately clean. Wool scoured clean enough for such fabrics—as clean as the skilful manufacturers of such fabrics usually scour their wools—is the standard aimed at in all these scouring tests.

If Mr. Noble's ram has beaten the field, among Merinos, we believe he has still further beaten all other breeds, the proportion of wool to carcass being taken into account. We have heard much

of late of the "enormous" shrinkage of "greasy Merino wool." We have been told that while the wool of certain other breeds shrinks only 15 to 25 per cent. in cleansing, that of the Merino shrinks 60 or 70 per cent. Well, what of that, providing the Merino yet carries the greatest proportion of wool (*cleansed* wool) to meat? The scouring tests of the past have sufficiently demonstrated this fact.

CLOVER, AS MANURE.

In an article published in the Report of the Agricultural Department, a Mr. Wolfinger says, the cheapest, most easily attainable and best of all manures for a corn crop, is a dense mass of red clover, either in its green or ripened and dried state, ploughed down three or four inches only; just deep enough to prevent wastage, and yet near enough to the surface of the ground to be acted on by the sun's heat and the air. In its decay, clover thus affords certain, active and constant nourishment to the young and expanding roots of the corn. Both corn and wheat grown over a clover lay are very generally free from disease and insects, and better in yield and quality than crops grown on or with animal manures. But to secure this, we must manure the clover while yet young, with liberal supplies of plaster, lime or fine well rotted manure spread broadcast over the growing plants.

FAILURE OF FRUIT.

Within a few years past special attention has been paid to the cultivation of fruit in the southern part of Illinois, where the season is considerably earlier than in the central and northern portions of the State, and great stories have been told of the amount of money realized from small pieces of land devoted to strawberries, peaches, &c. The editor of the *Rural World* recently met a committee of the Illinois Horticultural Society, who were on their way home from a visit to the famous fruit regions of "Egypt." The report of these gentlemen is exceedingly discouraging. Hardly a sound peach was seen by them, so thoroughly has the curculio done its work. The yellows is also destroying the trees. The Concord grape is badly affected by the rot. In some cases full one half of the crop was already destroyed. A new and apparently formidable disease has appeared among pear trees. In one orchard in South Pass of 1500 trees, all of which appeared to be quite healthy early in the season, the committee found—in different places—first one tree, then two, and then five; all affected—not with blight or anything they had ever seen before,—but sick and dying, from an unknown disease. They finally dug up a tree and found a fungus growth spread over the roots of the tree, and only in one case was it found on a limb. It had cut off the entire connection, and with it a supply of sap, and so death ensued. Dr. E. S. Hall, of Alton, W. C. Flagg, and H. D. Emery, Senior Editor of the *Prairie Farmer*, were among the members of this committee, whose representations may be taken as another caution against reliance on specialties in farming.

HEREFORD CATTLE.

It is customary for the breeders of blooded stock to confine themselves to a particular breed, and it is not often that one has an opportunity of comparing the respective merits of different races on the same farm. Mr. F. W. Stone, an English farmer of Guelph, Canada, who occupies some 800 acres of the rich land in that section, has some fifty head each of Short-horns and Herefords, besides grades, the decendants of the best animals from English prize stock. In an account of a late visit to this farm, Sanford Howard, Esq., thus speaks of Mr. Stone's appreciation of the Herefords. We copy from the *Country Gentleman*:—

The Herefords have latterly been increasing in numbers on the farm, and this increase will probably be allowed to continue. After seven years' experience with them, their good qualities have been so prominently displayed that Mr. Stone has determined to adopt them as a permanent stock. They are found to be healthy, hardy, easily kept, fattening rapidly, whenever they have a fair chance, and producing the finest quality of beef. They are by no means the inferior milkers which the advocates of rival breeds frequently represent. Comparing them with the Short-Horns kept on the farm, all persons who have had anything to do with them concur in stating that the Hereford cows give, on the average, at least as much milk by the season as the Short-horns, while some experiments that have been made, show that in richness of milk the Herefords are superior.

Many of Mr. Stone's grade cattle are half Hereford, and a few are three-quarters of that breed. They show the leading characteristics of the Herefords very strongly. Some of them are cows, now giving milk, and they are good-sized, handsome animals, with indications of being good milkers. A lot of yearling and two-year old steers are about as promising, in reference to thriftiness and fattening tendency, as any grade animals of their age that I remember to have seen. Some of the steers have been subjected to the yoke, and bid fair to make active and powerful oxen.

LEACHED ASHES AS A FERTILIZER.

A very considerable portion of the ashes made in New England is purchased by the agents of soap-boilers, and passes through the process of leaching before it is used as a fertilizer. As they come from the factory "they are a mixture of a peculiar description; principally the insoluble portion of the barilla, potashes or kelp, employed in soap-making, mixed with cinders, lime, salt, and other occasional additions; and also with muriate of potash, common salt, and other saline matters." The insoluble portion of barilla—[*barilla* is the Spanish name of a seashore plant from which soda is made]—consists principally of lime, charcoal, sand, and the rust of iron. Arthur Young recommended the use of 60 bushels per acre, and described the immediate effects as very great.

A plain, sensible farmer of England gave Dr. Cogan his opinion of the value of soap ashes in the following letter:—

"My opinion of soaper's ashes is confined to the application of it as a top-dressing on pasture land. About twelve years ago I agreed with a soap boiler for 1500 tons of soaper's ashes. I used to apply about twenty wagon loads per acre, and a single bushing would let the whole in. I was laughed at and abused for my folly; the wise-acres alleging that my land would be burned up for years, and totally ruined; all which I disregarded, and applied my soaper's ashes every day in the year, reeking from the vat, without any mixture whatever.

"I tried six acres mixed up with earth; but I found it was only doing things by halves. My land never burned, but from the time of the application, became of a dark green color, bordering upon black, and has given me more, but never less than two tons per acre, ever since."

For the New England Farmer.

PRODUCER AND CONSUMER.

I see a great deal in the papers about the high price of goods,—articles of food especially,—in the cities; and being in the "trade" myself, I would like to say a few words on this subject.

I belive the great trouble to lie in the "hand-to-mouth system." It would be much to the advantage of the consumer to buy in larger quantities, and just as well for the merchant, though all will sell much cheaper in this way. And instead of goods going through two or three hands, let the consumer buy direct from the farmer or country merchant,—it matters but little which,—as it will come at the same price, as most of the country merchants exchange other goods for produce, which they sell for cash without profit, at their stores. If sent to market, they pay a commission of five per cent. for selling, and perhaps by the time the consumer gets the article there have been several other profits made on it.

The cost of getting a pound of butter or a dozen of eggs to market is about two cents, unless sent in large quantities; while, by the retail market rates, I judge that a profit of twenty per cent., and often higher, is paid by the consumer. As direct trade as possible between producer and consumer would be to the advantage of both. Nor do I think such a system would be much opposed by country merchants, for if the farmers sell their produce for cash at good prices, they will trade all the more, and it will save the traders here the trouble of handling goods on which they never make any great profit.

I would like to hear the opinion of traders and farmers on this subject. Crops of all kinds are very good in this section.

T. P. Bailey

Newbury Centre, Vt., Aug., 1868.

Remarks.—Although the foregoing communication has very much the appearance of a business circular, we cheerfully give it a place in our reading columns, because it suggests a *plan* by which the consumer may possibly avoid the profits of one or more middle men,—a feature that is often entirely wanting in the writings of those who complain of our market system. Now, if Mr. Bailey will reduce his theory or plan to practice; if by employing "runners" or "drummers" to take the orders of the city consumers, as our merchants keep this class of men in the country, or if he can attain the same object by other and simpler means, he may greatly extend his business with profit to himself and with benefit to those who live "from hand to mouth," provided that in the practical running of his machine, he can dispense with a few of the "wheels within a wheel" that now interpose between the producer and consumer. Of the probability of his being able to effect this, our readers can judge as well as ourselves.

For the New England Farmer.

HOW TO PAY FOR A FARM.

When so much is said against running in debt for a farm, it is refreshing to read instances like those recently narrated in the Farmer, where that responsibility has been boldly assumed and finally successfully discharged. Such instances of success show that there are men who still have faith in the profitableness of farming, and confidence in their own abilities. They further show that success does not depend entirely upon the possession of an unusual amount of physical strength, nor upon a lengthy experience. Indeed some of the most encouraging examples are those of men

who come fresh from other occupations, and relied upon their energy, perseverance and business-like habits, and general knowledge of the subject, rather than any special acquaintance with the details of management.

Whenever a person runs in debt for his farm, two conditions are necessary for its easy and rapid payment,—judicious purchase, and an adequate working capital. The choice of a majority of purchasers appears to fall upon places that have been run down; the buildings old and poor, fences out of repair, and land in a low state of cultivation, and perhaps, withal, an unfavorable location; the chief attraction being the low price such places usually command. But these neglected farms are generally the dearest kind to buy. The yield from them the first, second, or even the third season, must of necessity be small, while there is a constant call for extra labor and money for repairs and permanent improvements. The purchaser has in fact assumed a three-fold burden,—the renovation of the land, the reconstruction of the buildings, and the liquidation of the debt; either of which is quite sufficient for a beginner. If he undertakes to carry on all three at once, he has a task more fitting for a man of experience and capital. If he leaves a part of the work undone, he labors under disadvantages which materially affect his profits and comfort, so that at any rate he subjects himself to a trying ordeal.

There is undoubtedly real satisfaction in bringing up an old place, and in contemplating the progress as the result of one's own work; but when viewed as a matter of dollars and cents, these improvements can often be bought cheaper than they can be made. It may be far better, and even cheaper to pay, or promise to pay, five thousand dollars for a place in good order, than twenty-five hundred dollars or less, for the same number of acres, with equal natural advantages, but where buildings, fences and soil must be renewed. Although these figures are as two to one, it does not follow that it will take twice as long to pay the larger sum, nor that the risk in buying the former place is twice that of the latter. In one sense, the risk is less, and the notes of the purchaser would rate higher, for he has productive property. His labor and investments bring him quick and full returns, and he can devote all his energies and profits directly to the extinguishment of his debt; enjoying, meanwhile, the conveniences and comforts which render business and life pleasant, and which might require years of toil and patient waiting, were he obliged to provide them by his own labor. Moreover a farm which has not been run down is more salable, and should a change be desired, it can be effected more speedily and satisfactorily. If for these considerations the annual responsibility in interest, taxes, &c. is greater, there are greater facilities for meeting it, as the income is immediate and constant. A farm well bought may be said to be partially paid for.

Next to a judicious purchase, the speedy payment depends upon an adequate working capital. Unproductive land is worse than useless. Instead of supporting, it is an incumbrance to its owner. Land may be unproductive, to all practical purposes, from want of the requisite means to work it, and much larger capital is necessary on a sterile than on a productive soil. In all cases the purchaser should determine before hand just how many acres he can afford to let remain idle. Now an adequate working capital implies the power and ability to cause the whole farm to be productive,—to make every acre help pay for itself. It implies sufficient means to carry through an unpropitious season, without resorting to extra loans; as well as the ready money to take every advantage of the markets at which he buys and sells. Character may secure all the credit he desires, but the cash enables him to drive a better bargain. Of all others, the man in debt needs this capital from the outset; and until he can command it, it will be for his peace of mind and pecuniary interest to work for others, or begin as a tenant, or at least buy a very small place.

Some have such a dread of interest money that they pay all or nearly all their slender means towards the purchase money, and devote all the income as far as it may accrue to diminishing the principal, and allow only a meagre sum for their working capital, and thus they are hindered and circumscribed in all their operations. The farms are only partially worked, consequently scanty crops and small sales follow. The payment of the debt progresses slowly and tediously, and the very interest they sought to avoid becomes doubly oppressive, and they naturally conclude clearing a farm of debt is up hill work.

Debt is burdensome and dangerous, just in proportion to the means to meet its liabilities. Its terrors vanish before bountiful crops. But how shall the bountiful crops be obtained without the ability to work the land? A hundred dollars used as working capital will give larger returns than the simple interest it saves, when paid towards diminishing the mortgage. Working capital is the lever for throwing off the debt; and its amount and the manner of using it determine the rapidity and ease with which it can be accomplished.

Failures that occur through ignorance, imprudence or extravagance, constitute no argument against buying a farm on credit. Such causes would produce a similar effect in any legitimate business, and it is hardly fair to contrast a failure, thus occasioned, with success achieved under the opposite conditions. But when honest, hard-working and self-denying men fail in the attempt, or attain the desired end through such a long and difficult struggle that they cannot conscientiously advise others to embark in the same undertaking,

it is interesting to know the causes of their ill success. And will not four-fifths of them acknowledge that they either made a bad purchase, or lacked an adequate working capital? N. S. T.

Lawrence, Mass., Aug. 10, 1868.

Remarks.—It is true, as stated by our intelligent correspondent, that in some of the instances recently narrated in the Farmer, in which individuals who were successful in paying for and greatly improving farms bought on credit, were "fresh from other occupations." But is it true of any of them that they had no "special acquaintance with farm management?" One of the writers alluded to says, "not having had much experience in farm work;" another says that for "twenty-five years previous to my purchase, I worked at boot and shoe making;" but neither of them informs us just what his early training was, although the latter mentions a "*suitable* helpmeet" as an essential to success. Our Norwich, Vt., correspondent, however, tells us that he was brought up on a farm, and the successful Englishman and his wife were farm hands or servants. Our observation has resulted in the conviction that early training on the farm is, as a general rule, a condition to success, even with those who enter upon the business "fresh from other occupations." Exceptions may occur, and it is said that "exceptions prove the rule." We believe that the value of the knowledge and skill acquired by boys and girls during a twelve or fifteen years' apprenticeship to the various occupations of the farm is strangely underrated, and that it is wrong to speak or think of such as having no trade, or not having had much experience in farm work.

Quick Work. — The proprietors of the Marsh Harvester having offered a premium of $25 to the person who would cut and bind an acre of grain with their machine the quickest and best, a trial was had at Plano, Ill., July 24. The decision of the three judges is published in the *Prairie Farmer*. They divided the premium between two men who bound an acre of heavy and somewhat crinkled rye, with the horses on a trot, one in thirty and the other in thirty and one-half minutes—the latter doing his work a little the best. Two other men who had never bound on the machine did the work in thirty-four and thirty-eight and one-half minutes, respectively. The judges remark, "the ease and perfection with which the machine delivers the grain to the binder, and the facility with which men bind on it is truly astonishing. On examination of the work both before and after the grain was shocked up, we found it to be well done."

TOP DRESSING WITH SHEEP.

Our Braintree, Vt., correspondent, "H. H. C.," whose "New Plan for Top-dressing," was published in the Farmer of August 11, and many who have read that article, will be interested in the following statement by Sanford Howard, Esq., of the method of enriching land by sheep, practiced by Mr. Stone, of Guelph, Can., who has about 300 Cotswold and South Down sheep. Writing to the *Country Gentleman*, Mr. Howard says:

Some of Mr. Stone's land lies so far from his principal farm steading, that it cannot well be manured in the ordinary way. Very large quantities of rich manure are made, but it is chiefly applied within a distance convenient to haul it. The mode adopted with the out-lying lots, is to feed off successive crops with sheep, until the desired fertility is obtained. First, a crop of rye is sown in the fall. If it gets strong enough before winter sets in, the sheep are put on it. The next spring the sheep are turned on at the proper time, and the rye kept fed down as long as it continues to grow vigorously. When the growth of the rye is checked, the ground is ploughed, and sown to oats and vetches, which are fed off, and, when this crop is done, the ground is again ploughed and sown to rape or turnips, which are fed off in like manner.

Mr. S. has several fields where this course is now going on. His rams, which are intended for sale this fall, are on a field on which the second crop (oats and vetches) is just giving way to turnips and rape. The sheep are in high condition, and the ground is already well manured, though the feeding off the third crop will enrich it still more. The sheep, of course, have been *well fed;* when the green crop would not afford them enough to eat, they have had peas, or other additional food. The mode of feeding the green crops is that adopted in England, enclosing with hurdles a certain extent, on which the sheep are put from day to day.

This is a practice which I think might be introduced into this country with good results. Our people hear of the English farmers enriching their land by sheep farming. But it is quite a different thing from turning sheep on to the land, to live or die from the grass or weeds that may grow—often to gnaw the the grass to its very roots, and starve the

sheep besides. The sooner it is found out that *this* kind of sheep farming does not enrich the soil or its owner, the better for the country.

HINTS FOR THE GARDEN.

The August number of the New York *Horticulturist* is rich in seasonable hints. We copy a few paragraphs:—

Bulbs of all kinds, if they have been growing in the same place for two or more years, ought to be taken up as soon as the leaves begin to turn yellow and they show signs of ripening. If the bulbs were planted last season, they are as well to remain another season, although the flowers may not be quite as large and fine as when the bulbs are yearly replanted in fresh soil. If left in the ground, well-rotted manure should be supplied liberally, and lightly forked in late in the autumn. When the bulbs are taken up, lay them on shelves where they will dry in the shade until wanted. Make the ground for replanting deep, placing plenty of well-rotted manure well intermixed; then plant the bulb three inches deep, surrounding it entirely with half an inch thick of clean sand. The replanting should be made at different periods, as those first planted will be the first to blossom in spring, and by planting at different times, a succession of blossoms may be had next season.

Cuttings of almost any plant may be struck now, because the common soil is almost as warm as a hot-bed, and a sash placed over it almost anywhere, and shaded, will soon produce a mild, gentle, moist atmosphere. The best cuttings for this time are formed from the ends of the young growing shoots; but any young wood, and even badly formed cuttings, may now be easily struck. It is a good plan for beginners to practice at this season, for if they fail with the first, there is time for renewal without loss or expense, as sometimes results from inexperience during early spring propagating. Sharp sandy loam is a good material for the bed, and it should be looked at as often as once a day, and, when needed, sprinkled with tepid water. Morning is the best time to do this.

Chrysanthemums.—It often happens that, from want of care and attention, old plants of chrysanthemums become ragged and sprawling. These may be turned to good account by layering the shoots at this time, by which a number of small, well-shaped plants may be had, each of which will give a number of blooms and form pretty objects for the window or conservatory late in the season.

Camellias should be carefully looked over this month, and old plants that have filled their pots completely with roots will require abundance of water, while those in which the roots have not quite filled the pots, require only to be moderately watered.

Evergreen or Deciduous Shrubs that have completed their growth for this year, may now be moved with safety from one part of the grounds to another, but it would not do to take them from a nursery and transport them any distance. After setting, water thoroughly and mulch at once. New roots will at once form, and the plants will start strong and vigorous next spring.

Pelargoniums should be repotted this month, if not before done. In doing the work, trim off the outside of the ball and roots with a knife, but not shake it clear of the soil or so as to break the ball. Use strong heavy soil with good drainage rather than light sandy loam.

Carnations and the varieties of pinks may all be layered this month, and make good plants before the close of the season.

For the New England Farmer.

A VERMONT FARM.

A Stumpy Farm growing Smooth—Cows, Sheep and other Stock—150 Tons of Hay—15 acres of Oats—A Splendid Field of Wheat—Rotation—Management of Manure—Dutch Cattle—Night and Day Pastures—Hours for milking—Butter and Cheese.

Last winter I referred to the very convenient barns of Thomas Baker, Esq., of Barton, Vt., and the stock I saw in them.

I again visited the farm July 25, and will mention a few items that seem to me worthy of notice. Mr. Baker owns about seven hundred acres. The timber that formerly stood upon it was mostly hard wood, such as maple, birch, beech, &c., and the soil is of good depth, color and strength. The pastures where he grazes twenty-seven cows, three or four hundred sheep, besides young cattle and colts, are still in that somewhat rough state that immediately follows clearing.

When the land is first cleared one crop of grain is usually raised, with which is sown grass seed, usually timothy alone, but sometimes mixed with clover. Then the land is pastured, at least until the stumps are rotted sufficiently to be removed, and sometimes permanently. As pastures, such lands are not generally improved by ploughing.

The fields, on which over one hundred and fifty tons of excellent hay is being cut, have been tilled and are so smooth that the Wood's mower and the revolving horse-rake seldom meet with obstructions. The hay was mostly timothy, but on the newly stocked pieces there was quite a mixture of red and white clover,—the last seems to be a natural production, and is quite a valuable addition.

About fifteen acres of oats are growing this year; a part of them on land newly cleared. But the crop that is especially deserving of notice is five acres of splendid spring wheat, which is now nearly mature. It is remarkably uniform in height, color and promising ap-

pearance, and is likely to yield from thirty to forty bushels per acre. It lays in a central part of a large field, and in a depression that has at times been too wet for satisfactory cultivation; but a stone under-drain was made through it last year that carries off the surplus water which irrigates the grass lands below.

To show the cause of so good a crop, I must refer to the system of rotation adopted. The land is allowed to remain in grass about eight years. It is then ploughed in the fall, about ten inches deep, and oats sowed the next spring, without manure. The next fall the manure that was made the previous winter is applied before ploughing, and then it is ploughed six or seven inches deep, leaving some of the old sod undisturbed; about thirty loads, of thirty-five bushels each, are put on an acre,—each load makes five heaps, before spreading. As early the next spring as the land will do to till, it is well harrowed, and two bushels wheat per acre are sown, of a variety brought from the west, called Fife, and the grass seed is sown at the same time.

Last spring, as the ground was in good condition at the time of sowing, it is probable that the under drain assisted materially in drying it. A rich, well-prepared seed bed sown at proper season will seldom disappoint the farmer in a crop.

This land is well adapted to wheat. One year Mr. Baker raised four hundred bushels; some of the land yielding forty bushels per acre. It will be seen that in this management, hoed crops do not enter into the rotation, and the manure is at the barn through the summer after it is made.

Some farmers may, at first thought, object to this method, believing that a hoed crop is necessary to secure a thorough pulverization of the soil, and the destruction of weeds. Mr. Baker secures the first by his manner of ploughing and harrowing; and the second, by his management of the manure, which is allowed to ferment during the summer sufficiently to destroy the vitality of the weed seeds that may be in it.

His manure is all under cover, and in two places hogs have so worked over the mass that one could hardly imagine a richer fertilizer, well decomposed, unctuous, and juicy. In another shed ten grade Dutch calves have been fed milk or whey all summer, and are making the largest growth of any lot of calves raised by Mr. B. since he commenced farming. They are not fed meal, but have very nice hay.

The other crops, barley, potatoes, turnips, and fodder corn, occupy a few acres, and are making such a growth as speak well of the fertility of the soil.

His herd of Dutch cattle have increased by one calf, dropped by the heifer "Beauty," the first of June, when she was only eighteen months old. She is as large as some three-year-old native cows. The imported cow suckled her calf until he was six months old and she four months with calf again. At that time she gave thirty pounds of milk a day. This stock is so little known and so lately introduced, that I look upon its growth and development with much interest.

The cows on this farm have two pastures,—one for days, and the other for nights. The hours for milking are five o'clock P. M. and five A. M. The cows are tied up in the stables when milked. During the month of June, twenty-two cows yielded over one hundred pounds of butter per week to sell, beside supplying the family. In July, twenty-four cows make a sixty pound cheese a day. Three cows suckle their calves. One veal calf, a half-blood Dutch, five weeks old, dressed 125 pounds of meat, according to the butcher's estimate. The calves raised to keep, have been fed on sour milk, whey and hay, and have not diminished the profits of the dairy.

After visiting such a farm, one's respect for the calling is increased. Its management is a trade to be learned, as well as a work to be performed. Z. E. JAMESON.

Irasburg, Vt., July, 1868.

HAY TEDDERS.

I had a little experience with the hay tedder three years ago, in drying a piece of rowen, or second cutting, of eight acres, which was all clover, and quite heavy for a second crop. I had taken off forty loads at the first mowing, in two weeks, the last of June and first of July, without the use of the tedder. The 20th of August I commenced on the second crop, full one and one-half tons to the acre, some of it so heavy as to fall down or lodge; and being desirous to hay and house it as soon as possible, I borrowed a tedder of a neighbor, and went into it with all possible despatch. The weather was fair and hot, and every particle of it was dried and housed without any wet. The tedder was used freely, but before I got half through I noticed the stemmy look of the hay and was aware of the loss of branches, leaves and heads, but hastened to save it all while the weather was so favorable, and kept the tedder going; but was fully convinced of my error on feeding it the next winter to sheep. Clover will generally be eaten with great avidity, but this was so dry and stemmy the sheep loathed it, and not more than half was eaten, while the first cutting, though much coarser, was eaten very much cleaner and with better relish. Full half the value of the rowen was lost. The tedder should not have been used, though it is a valuable implement in all grasses but clover, and a great aid in hay making.—*J. W. C., Mont Vale Farm, Vt., in Jour. and Watchman.*

—*Punch* advises farmers to sow their P's, keep their U's warm, hive their B's, shoot their J's, feed their N's, look after their potatoes' I's, and take their E's.

A LARGE COTTAGE.

We present another of Mr. G. E. Harney's plans and perspectives of country or suburban homes. Our object in giving these illustrations is rather to afford hints and suggestions to those who are considering the subject of building, than to furnish working models. There are peculiarities about the arrangement of the rooms and in the form of the exterior of this house which are worthy of notice. It was designed for a situation where the best views of the surrounding landscape were obtained from the front entrance to the house; hence the arcade, No. 1, in the plan, occupies that position, shielding the front door, and at the same time forming a very pleasant lounging place, or summer evening retreat. Glazed doors open into the vestibule, No. 2, on either side of which is an arched recess for clothing, and in front a Gothic arch divides it from the hall proper, No. 3, which is 10 feet wide and 18 feet 6 inches long; on the left, two doors open into the drawing room, No. 4, measuring 15 feet by 18 feet 6 inches, and lighted by a mullioned window in front, a large bay on the side, and a window on the rear reaching to the floor, and opening upon a veranda, No. 10.

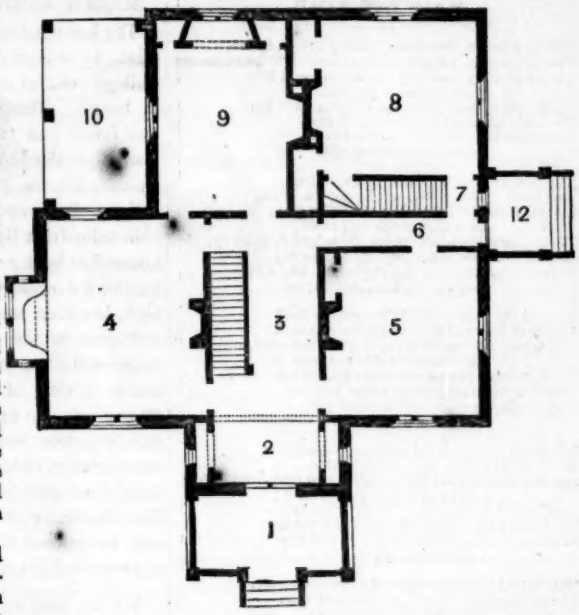
At the end of the hall a door leads to the library, No. 9, 12 feet by 15, containing two closets, with a recessed window between. No. 5 is the dining room, 15 feet square, and opening upon a back entry, No. 6. At No. 7 are the back stairs above and below. No. 8 is the kitchen, 14 feet 6 inches by 15 feet, containing two large closets, in one of which is a dumb waiter from the cellar kitchen. No. 12 is a portico over the side entrance.

The design represents a building of stone, which material, however, is not estial to the general plan or perspective of the house. The second floor contains four large chambers, with closets, a sewing room over the vestibule and hall, &c.

CROSSES FOR EARLY LAMBS.

Mr. Peart, the butcher, has been urging me for some time to raise early lambs for market. I told him that I thought of buying a thoroughbred South Down ram this fall, and picking

out a lot of large Merino ewes to cross with him. "Don't you do it," he replied; "get a Leicester. The Leicester lambs are far better." "Is it not too violent a cross?" I asked. "Not at all. Mr. A. got a Leicester from Canada and crossed him with common Merino ewes, and had great luck. I don't believe he lost a single lamb, and they were splendid. They were the best I ever killed. There is nothing will pay you so well. Mr. B. did the same thing with a South Down, and he had no end of trouble in lambing. The heads are so large; and after all, the lambs were nothing like as good as the grade Leicesters. You will miss it if you get a South Down."



I wrote to Mr. Samuel Thorne, who has had several years' experience in raising grade South Down lambs for the butcher, asking his opinion on the point. He replies: "My own experience does not agree with that of Peart. I have had many South Down and grade South Down lambs, and never, to my knowledge, lost one owing to the size of the head in lambing. As you know, the South Down has by no means a large head. Some of the other Downs have. I fancy Mr. P. has confounded the breeds. In using a Hampshire ram Down one season we had a great deal of trouble, and some loss from this cause. I never before heard any complaints of grade South Downs not 'dying well'; on the contrary, the New York butchers, as far as my acquaintance extends, prefer them to any other."

I think Mr. Thorne hit it exactly, and that the ram used by Mr. B. was a Hampshire Down. When at Geneva last week, I saw a fine lot of grade South Down lambs raised by Mr. Swan, from common Merino ewes, crossed with a thorough bred South Down, and he said he had had no trouble with them. On the contrary, he was delighted with the cross. They had all the marks and the general appearance of the South Down.

Mr. Thorne says he has no doubt that "any of the improved mutton breeds, crossed with common Merino ewes, will produce lambs that will pay a handsome profit." His plan is "to buy good, strong ewes in the latter part of August, selecting those that have the appearance of being good milkers. They are coupled the first of September, so as to bring the lambs in February. The ewes are kept on good hay during the winter, and as they near the time of lambing, one feed of roots a day is given. After lambing they are removed from the flock, the supply of roots increased, and bran mashes and some grain added. The object now is to create as great a flow of milk as possible. The lambs soon show a disposition to eat, and a place is then set apart for them where bruised oats and cracked oil-cake, with the best clover hay, are given ad libitum. If the lambs do well they are all sold and delivered by the 1st of June, and the ewes then have the summer in which to get ready for the butcher in the fall. Near any city or large town where early lambs command an extra price, there can be no doubt of the profit to be made by raising them. As soon as the lambs reach 60 lbs. they may be sent off. Mine usually brought me from $5 to $8 each. I paid from $2.50 to $4.50 for the ewes, and sold them fat the next fall for from $5 to $7, and I had the fleece besides."

This looks like a profitable business, and as June is rather a dry time financially on the farm, the money from the lambs would be very convenient.—*J. Harris, in Am. Agriculturist.*

KITCHEN ODORS.—Meat which has been slightly tainted may be restored to perfect sweetness, and the odor arising from it while boiling entirely prevented by throwing into the pot a few pieces of charcoal contained in a small bag. The odor of vegetables slightly affected may be prevented in the same way. Red pepper, and even black pepper, produces a similar but less perfect result.

HARVEST TIME.

The lengthening shadows, leaving the green lea,
Creep down the rugged rocks and stoop to kiss the sea;
Then hurriedly climb up again, turn and flee
Back to the purple hill.
Up the broad path the reapers homeward go,
The little gleaners wander to and fro;
And from the valley, lying just below
Echoes the tinkling rill.

The lindens, leaning over the green lane,
And hung with samples of the golden grain,
Caught from the fullness of the laden wain
As it bore home its prize.
Their clustering leaves press the bright light away,
And so beneath reigns twilight all the day,
Save when some straying sunbeams, like a fay
Peeps in with laughing eyes.

Beyond the harvest fields the rolling land
Slopes to the sea; toward the level strand
The waves ride proudly in, to greet the sand,
Each bows its silvered crest;
Then, rearing up, sweeps out again to sea,
Chanting upon their way, sweet melody,
And so they rise and fall unceasingly,
And never are at rest.

Wrapped in a peaceful stillness Nature lies,
As if, while gazing on the quiet skies,
She had looked past their depths, had met God's eyes,
And in that gaze grown calm;
As if, awed by the solemn sight, she lay,
Or, fallen asleep, was dreaming life away,
Singing, unconsciously, by night and day
A reverential psalm.

Half veiled in golden light of shimmering air,
The landscape stretches, wondrously fair,
No trace of paling beauty anywhere;
Nature is in her prime.
In richest robes the hills and woods appear,
The lakes and springs lie motionless and clear,
Ruled by the fairest Queen of all the year—
Beautiful harvest time.

The silver river, winding through the lea,
The singing birds on every greenwood tree,
The music of the never silent sea,
The deep and silent wood,
Are never changing witnesses that He
Who made all these fair things so graciously
Is mighty in His love, and prayerfully
I whisper, "God is good."

Hushed for the night is labor's busy hum,
The patient oxen from the home croft come,
Their yoke unloosened, and their day's work done,
Down to the little spring.
In from the sea the fragrant breezes roam,
Bearing the scent of sea flowers, freshly blown,
And murmuring of their wild, free ocean home,
They gladden everything.

Like little lambkins hastening to the fold,
And seeking shelter from the night and cold,
Drift the white cloudlets to the gates of gold,
And enter one by one;
All day ranging about the quiet sky,
God's great wide pasture ground stretched out on high,
They've wandered, and, now weary, homeward hie,
Where gleams the sinking sun.

Into its rainbow curtained setting place
The golden orb rides down with stately grace,
Slow veiling in the clouds its radiant face,
And lo! at its command,
Longer the shadows fall on rock and tree,
From my sight fades the harvest plain and sea,
And twilight clasps its pale arms lovingly,
About the peaceful land.

—Hon. N. S. Townshend, President of the Ohio Wool Growers' Association, says Combing Wool has been grown in Ohio, which has been pronounced by experts to be equal to that grown in any part of the world

MAINE AGRICULTURAL COLLEGE.

The last number of the *Maine Farmer* contains an editorial "Look at the Industrial College" of that State, of about two columns in length. The college grounds consist of two farms and two sets of farm buildings, about one third of a mile apart, and comprise about 365 acres, 175 of which are under cultivation. It is situated in the town of Orono, nine miles from Bangor. One of these farm houses has been rebuilt at an expense of about $5000, a dormitory 47 by 63 feet, 2 stories high, has been erected, at a cost of $18,000; and near to the dormitory, which is situated between the two old farm houses, and commands a view of both, a laboratory, 40 by 50 feet, with an extension 32 by 50, to cost $25,000, has been commenced—sums that considerably exceed the $30,000 which the legislature appropriated for building purposes. The Trustees give notice that the institution will be opened for the reception of the first class of students on the 21st of September.

We are sorry to find that the Editor of the *Farmer* was not entirely pleased with the situation, the buildings, or the prospects of this institution. He speaks of the soil of the farm as chiefly a clayey loam, and says, "it by no means represents, as such a farm should represent, an epitome of the soil of Maine, and it is in a section that never has and never can take high rank as an agricultural district. Everything is against it. We fear the farm will never be a favorable locality for the proper testing of, and experimenting with, the different kinds of fruit trees—a feature of great importance in connection with the purposes of the Institution, and one as desirable to be secured as any that can be mentioned." Still he noticed "near the north-west corner of the farm, three or four acres sufficiently rocky and apparently of good character for an orchard; while near the White farm buildings, especially to the north of the barn and upon a declivity facing the northward, is considerable sandy or light loamy soil."

We are not acquainted with the "clayey loam" of the Penobscot and its tributaries, but if it is any thing like the clayey loam of the valley of Lake Champlain, with which we are acquainted, we must hope that the strong hands of the young men of Maine, guided by the teachings of science and aided by modern

machinery, will in a few years give to this college farm a far more favorable and hopeful "look," and perhaps demonstrate the possibility that the section in which it is located is capable of a high rank as an agricultural district.

Our visitor thinks a cheaper structure might have answered for a dormitory, and remarks that "when window glass is used that cost two dollars per light, and doors that cost twenty dollars each, we should question whether somewhat cheaper glass, and good, but less expensive doors, would not be far better, provided by the means a little money could be saved for additional buildings, scientific apparatus, or other necessary equipments of the college."

In deciding to open the college, "without a President, without a library, without a laboratory, with but a limited apparatus, and with only a Professor of Mathematics and a Farm Superintendent," the Board of Trustees, he says, are acting on a "judgment that is certainly different from our own, and while we wish it the most complete success, we earnestly hope the result will not be such as to bring disappointment."

In relation to the crops and stock now on farm, which have been managed for the two years past by Hon. John H. Gilman, the editor of the *Farmer* says:

The present season the farm has cut ninety tons of hay, the yield averaging about one ton to the acre. Haying was commenced the 5th of July. The hay, with the exception of three tons of meadow hay, is of superior quality, chiefly herdsgrass and redtop, and is in excellent condition. The experiment was tried of putting in one mow immediately after it was cut, with no making and no foreign moisture in the grass. It was cut the 18th of July, about 11 o'clock A. M., and hauled into the barn about 2 o'clock P. M. Four tons were put into a mow by itself, and upon the top, old straw to the depth of a foot or more was pitched on. The result is a complete loss. The other crops upon the farm are seven acres of potatoes, seven acres of barley and three and a half acres of buckwheat. No corn is raised, from the fact that four bushels of potatoes can be raised easier than one of corn. Eight acres of land are being summer tilled, upon five of which grass was ploughed under early in the summer, and buckwheat sowed and ploughed under upon the other three. To the south of the White farm house, is a small fruit garden in which thirty to fifty apple trees, of rather small size and of somewhat stunted appearance, which led us to the belief that the soil is not a favorable one for fruit trees. This appearance of the trees, however, we were informed was due in a measure to neglect, and we were also informed that in some places in the vicinity, good orchards of fine healthy trees, where they had been properly cared for, were to be found. In the fall of 1866 four hundred pear trees were set out in the nursery, and of these certainly not more than one-half are now living. Some four thousand young apple trees are looking very well.

The stock upon the farm consists of six head of full blood Durham stock, as follows: one bull, two cows, one one-year-old heifer and two calves; together with seventeen head of grade cattle, five horses, sixty sheep and lambs, and four swine.

THE JAMESTOWN BREED OF CATTLE.

Will you or some of your correspondents inform me through the NEW ENGLAND FARMER, what breed you would call a cow that resembles the picture of the Dutch cow in the last FARMER, in color and shape, but has no horns. I am informed her grandmother was imported from Ireland in the Jamestown. I have a very likely male calf from this cow, which is now more than two months old, and he too will be hornless, and I would like to know what breed to call him. Vegetation has advanced more rapidly for two months past than I ever recollect observing.

THOMAS HASKELL.

W. Gloucester, Mass., Aug. 6, 1868.

REMARKS.—On reading this inquiry, we remembered of having seen, and we thought of having published, some account of the Jamestown cow, not long since, but for some time we were unable to lay our hands upon the documents, without which we did not like to trust to our memory for a reply. After considerable inquiry and hunting, we find in the abstract of the County Reports in the Agriculture of Massachusetts, a detailed statement of her history, written by our correspondent, A. W. Cheever, Esq., Sheldonville, Norfolk County, Mass.

It will be remembered that in 1847, the United States ship, Jamestown, Capt. R. B. Forbes, commander, carried a cargo of provisions from this country to the starving people of Ireland. The Lord Lieutenant of that country, wishing to confer some token of his gratitude, made a present of a fine Suffolk heifer to Capt. Forbes, which proved to be a deep milker, giving in her flow twenty-six quarts beer measure of the richest milk. Capt. Forbes sold the cow on his arrival here and gave the proceeds to the Irish Charity Fund. John Marland of Andover, Mass., was the purchaser. From him she passed into the hands of J. D. Bates, of Swampscot, and afterwards into the hands of Mr. Osborn of Danvers, Mass.

Mr. Sanford Howard, who saw this cow and who had also seen the Suffolks in England, says that she closely resembled the Suffolk, an English breed without horns. He also says that the Suffolks are different in

color, shape and characteristics from the Galloways, which are also "polled" or hornless, and almost invariably black.

Col. Stone of Dedham, Mass., who is endeavoring to preserve and perpetuate in its purity, as far as possible, this Jamestown stock, says that as far as he knows, the original cow never had but one heifer calf. A bull called "Jamestown" from this cow, by "Beverly," a thorough bred Jersey, (out of "Flora" by the "First Prize Bull," at the Royal agricultural Show in Jersey,) has left a progeny which appears to possess superior dairy properties. Nearly all the descendants of the cow "Jamestown" are without horns, showing the remarkable strength of the Suffolk strain.

In 1867, the first premium of the "Wilder Cup" was awarded by the Norfolk County Agricultural Society to J. W. Gay, of West Dedham, for his superior herd of fifteen milch cows, eleven of which were Jamestowns.

In closing his statement to Mr. Cheever, Col. Stone says:—

"You know the strong prejudice I have in favor of this stock, and you have seen some good specimens of the same. They possess qualities which I consider very valuable in a dairy stock. They are very gentle, I never having known a vicious animal, unless they were too strongly crossed with the Jersey. When 'Jamestown' was five years old, a four year old boy could manage him in safety; he was worked in harness and perfectly handy. They are perfectly hardy, good feeders, and hold out in their milk remarkably, which I consider *the great recommendation*. I know of several that *give milk the year round*."

The cow "Flora," mentioned in the above account as the grandam, on the Jersey side, of the bull "Jamestown," was imported by Mr. Motley, and proved one of the most remarkable of that celebrated stock, having made sixteen pounds of butter a week.

We think it probable, therefore, that Mr. Haskell's cattle belong to the Jamestown stock, and we hope that the foregoing will be a satisfactory answer to his inquiries.

But is this all? If the anticipations of our Norfolk friends shall be realized as to the value of this stock, may we not recognize in the history of this "Suffolk heifer,"—a mere token of the gratitude of a suffering people,—"a divinity that shapes our ends, rough hew them as we will,"—a divinity that has said, "Cast thy bread upon the waters, for thou shalt find it after many days?"

NEW PUBLICATIONS.

THE AMERICAN DEVON HERD BOOK, published under the direction of the Association of Breeders of Thorough-bred Neat Stock. Edited by Horace Mills Sessions, South Wilbraham, Hampden County, Mass. Springfield. Mass., S. Bowles & Co. 1868. Price $2 00 for first vol. and $2-50 for second, or, bound together, $4 50, post paid. Pages 144 and 148.

The addition of these two volumes, just received, makes our library quite complete in the Devon department, as we had previously on our shelves the first and second volumes by Davy and the third volume by Sanford Howard, now Secretary of the Michigan State Board of Agriculture. Mr. Sessions having secured the few copies of Davy's English Devon Herd Book in this country offers them, bound together, for $4.50. In the first volume of Mr. Sessions' American Devon Herd Book, published in 1863, fifteen States were represented by fifty-three different breeders, with the pedigrees of 151 bulls and 350 cows, making in all 501 animals, all owned in America. The second volume, published in 1868, contains the pedigrees of 252 bulls and 418 cows—670 in all—from 150 breeders and owners, residing in 21 States, and some in the British Provinces.

In consequence of the prohibition by the general government of the importation of cattle as a precautionary measure against the introduction of the plague so fatal in England, no Devons have been imported into this country since the publication of Mr. Sessions' first volume; nor is it deemed necessary to do so, as he says it is the testimony of those who have visited the best herds in England, that we need not go abroad to obtain animals equal in every point of excellence to the best that can be found in England.

We do not feel competent to pass a critical judgment upon the execution of the difficult task which the editor has undertaken and accomplished. So favorably, however, was his first volume received by the breeders and owners of thorough-bred Devons, that the editor remarks, "We only hope that the second volume will meet with the same favor as the first, and be worthy of the title of the American Devon Herd Book, and receive the universal patronage of the Devon breeders of America. The second volume is larger, and with the experience gained in the preparation of the first volume, we cannot doubt that the editor has produced a work at least proportionally more perfect and valuable, and we need only inform the breeders of this favorite race of cattle, that the second volume of the American Devon Herd Book is ready for delivery.

Notice is also given that the third volume will be published in three or four years, or as soon as a sufficient number of pedigrees are received to warrant its publication.

THE AMERICAN STUD BOOK: Containing full Pedigrees of all the Imported Thoroughbred Stallions and Mares, with their Produce, including the Arabs, Barbs and Spanish Horses, from the earliest Accounts of Racing in America to the end of the year 1867; Also all the Native Mares and their produce, Alphabetically arranged. With an Appendix, giving Pedigrees of all the Native Stallions whose Dams have no Names, with a full and copious Index to produce of the Mares. By S. D. Bruce, Editor of the *Turf, Field and Farm*. Vol. I. A to L. Chicago: E. B. Myers & Co. 1868. Price $10. Large octavo, 664 pp., Charles Ruthven Byram, 323 Washington St., Boston, sole agent for New England.

The print, paper and illustrations, mostly steel or copper-plate, are in the best style of modern book-making. But we are not sufficiently well posted on Stud-books, or on the history of American horses to express any opinion as to the correctness or thoroughness of this work. The author informs us that twenty years have been occupied in gathering the information which it contains, and that none but those who have inquired into the loose, obscure records of the past have any idea of what a herculean task it has been. From the delay in the publication of this book, the writer says, complaints have arisen which have been very annoying; and if the author had only looked to his own ease and a speedy remuneration for his services, he would have hurried it out years ago. But a feeling that the great labor of his life should correspond to what he knew to be the correct standard, prompted him to go over and over it again; and, in following a chain which later researches gave the key to, he had to throw out matter previously arranged. In addition to this, his desire to remedy the slightest defect led to a continual repetition of the work.

We are assured that eminent turf men and breeders in all sections, who have examined the proof sheets, approve and recommend it as the most complete and exhaustive work of the kind extant. The publication of most of the pedigrees in the weekly issues of the *Turf, Field and Farm*, during the past three or four years, must we think have secured many corrections and hints from breeders and horsemen among the readers of that widely circulated journal.

On the whole we are much pleased with the appearance of the first volume of Mr. Bruce's American Stud-book. By printing the pedigrees on small type and in double columns, much space is saved and great distinctness secured.

—An Ottumwa, Iowa, paper says that Rev. Dr. Parker, of Bladensburg, in that county, pared a wart on his hand, splitting it to the quick, and then mashed one of the old-fashioned potato bugs on the wound, for an experiment, when he was seized almost instantly with a deathly sickness, so that he was unable to fill his regular appointment to preach, and since then has been under the care of four physicians, with but little hope of his recovery; mortification having taken place in his arm, rendering it necessary to amputate.

For the New England Farmer.

PRESERVATION OF FORESTS.

Your correspondent, Z. E. Jameson, in FARMER of August 1, controverts my idea of the necessity of greater care for the preservation of forest trees. He assumes "that this earth was designed for man's habitation, and that it is his duty to subdue and replenish it." This may be true in a certain sense, but does it follow that it is man's duty to mangle and destroy the grand old forests, the workmanship of Nature, the mother of us all, and to treat every tree as a mortal enemy? or, that there is no danger of carrying this war of extermination and subjection too far?

Where wood land is worth no more than, according to the representation of Mr. Jameson it is in Vermont, or where it is not likely to be worth any more in the future, the cultivation or even preservation of forest trees may not be advisable in a pecuniary point of view. Where good wood land is worth only from $2 to $40 per acre, as he says it is in Northern Vermont, and the farmer has not already more cleared land than he can cultivate without resorting to the skinning process, he may have the best of the argument; but where, as with us, it is worth $300 and upwards, per acre, and the land, from being rough, is not worth more than $10 per acre, when cleared, for grazing, reason as well as experience teaches that the growth of the forest is more than the interest on the land.

But, adopting the course of your correspondent, what, in a few years, is to keep up the throb of the pulse of the iron horse that follows the net work of railroads that, like the veins of the human body, branch out in ten thousand ramifications, throughout the length and breadth of our country, wending its way over the snow fields of the Rocky Mountains, and through unknown deserts to the far Pacific coast?

I think, in view of this and other considerations, that it is high time to begin to practice economy with the forest growth. When I see the drain that is being made on the forests in my own immediate neighborhood, and see no reason why the same demand for wood should not exist in all parts of the country; when I consider the untold millions of dollars worth destroyed during the late civil war, and the fact that the lumber regions of Maine, years ago, were driven back to the head waters of the Kennebec and Penobscot, and when I remember that the great West is increasing in railroads, but decreasing in wood and timber, I feel that it is high time to take measures to secure a supply for the future.

I am not enough acquainted with climatology to say what the effect of the forest has upon our climate, but I am aware that in certain bleak localities on our farms, a forest will often shelter fields from the cold winds, and make them a week or two earlier and warmer

in spring for cultivation. This I can prove from experience on my farm, where about three acres of wood stretch along the northwesterly side of a swell of land, thereby sheltering ten or fifteen acres in two fields in a southeasterly direction, from the wind that continually sweeps up in a northwesterly direction, through a tract of country two and a half or three miles in length, between two long ranges of hills. Forty years ago, where the said forest trees now stand,—many of which are large enough for "saw-logs,"—a field of Indian corn flourished; the forms of the hills still remain plainly visible among the trees. I believe that, casting the legal interest on said land at $20 per acre, its full value without the wood, from that time to the present, and estimating the wood as it now stands at its market value, it will be shown that no loss has been incurred in allowing it to grow up to a forest, though susceptible of cultivation as a field.

Now, according to Mr. Jameson's plan, what should I do but rise, slay and destroy that forest? Were I to do so, I should consider myself a fit subject, at the next sitting of the Probate court in this county, for the appointment of some one of my neighbors to a guardianship over me and my estate.

M. J. Harvey.

Epping, N. H., Aug. 17, 1868.

THE CATTLE DISEASE.

The assumption that cattle from Texas or any other section, apparently healthy themselves, should leave on the ground over which they pass, or in the water of which they drink, a poison, an insect, or anything that causes deadly disease in native cattle, is one which many cattle dealers and butchers in this market are unwilling to admit. That the seeds or germs of fevers and other diseases of the human family may lurk in the clothing of nurses, is a fact more readily admitted and more easily accounted for.

To admit that there is much mystery about the present cattle disease does not explain the facts which have been observed for years by people at the West, who have had a dear-bought experience with the "Spanish Fever." To the facts stated in the communication in the last Farmer, from J. R. Dodge, of the Agricultural Department at Washington, we may add, from the Report for 1866, the statement that Texan cattle driver to New Orleans do not communicate the disease to the cattle of Louisiana. In 1865, eight hundred Texan cattle were driven into Mississippi county, Arkansas, and scattered throughout the county without producing the disease. The fact that these sections lie on the Mississippi river, and in a *miasmatic* region is suggested as the reason for the non-development of the disease. We also copy from the same Report the following communication from Col. J. Wilkerson, originally published in the *Southern Cultivator*:—

"I have been a cattle dealer for twenty-five or thirty years, and in that time have had many a death among my stock by this disease, and have in consequence taken some notice, meanwhile endeavoring to learn its causes and how it was brought about. I notice that cattle scarcely ever take the fever if let remain where they were raised, and I am fully convinced it is generally brought on by a change of climate. For instance, you take cattle from the mountain country to the low country and they will take the fever in a short time and die, but their disease will not affect the cattle raised there; but, on the other hand, take cattle raised in what we call a distempered part of our country—that is, the low country—from warm latitudes, up into a colder one, they will themselves improve all the time; but, without being sick themselves, they will spread the fever and kill the cattle in the section of country into which they are taken, till they travel on, or stay or have staid long enough for the fever to leave the system. I have been in the habit of driving cattle from Florida to Virginia, and found my cattle to improve and do well; but after I passed the line of 34 degrees, they began to spread the fever all along the line of travel among the stock raised in that section of the country, till I struck the line of Virginia, which is a distance of about 250 miles, then it ceased, and all went on well. I suppose the reason for its stopping was, that my cattle had been out of the low country long enough to become acclimated. Hence, I think the disease is originated from a change of climate, either from a colder to a warmer climate, or taking them from a warm climate to a more cool and healthy one. How it is that they carry the disease with them, and give it to others without injury to themselves, is a mystery I am not able to solve, and will leave that to be discussed by the bureau of investigation."

The following case is given by the *Prairie Farmer*:

Last fall a herd of Cherokee cattle (85 head) were brought into Champaign County and placed on a farm with a herd of native cattle (38 head). They were fed together all winter and through this season so far. This herd was out of the track of the later Texas cattle, but on the 15th of July they were brought up on to the prairie where such had passed, and are still kept. About the third of August the natives began to die and when we were there, 20 were dead and all the

others sick, while the Texas cattle were all healthy and hearty, right among them, showing plainly that cattle wintered over do not communicate the disease, or contract it.

As illustrative of the opinion that native cattle do not communicate the disease to other native cattle, the *Prairie Farmer* says:

Post mortem examination has been made of a cow near the stock yards, which showed all the outward symptoms. The examination showed a most marked case of the disease. On further inquiry about the yards, we learned that a large number of cows which had ranged the prairies about there had died, while those in inclosures were safe and well. One instance was that of the proprietor of the Hough House, who has thirty-five cows which have been in a fenced lot joining the stock yards on one side, and the prairie on two other sides, where the Texas cattle have been pastured. These cattle are all safe and well, as are those of another lot nearly similarly situated.

WHEN TO CUT RUSTY WHEAT.

At a meeting of the Lexington, Ky., Farmers' Club, Aug. 8th, the reports as to the wheat crop in that section were quite unfavorable, and some members thought it would have to be abandoned. In relation to early cutting, especially that attacked by rust, Mr. Starks said, as reported in the *Farmers' Home Journal*:—

His practice has been to cut wheat when attacked by rust as soon as it is in the dough state, and he has found it to be a profitable plan, as his merchants in Lonisville, to whom he has sold his crop for some years, prefer his wheat to that of many other farmers, simply because he cuts it earlier than is customary and before its valuable properties have been wasted, and when it makes more flour, and of a superior quality to that cut later. He is convinced, from long and careful observation that the vaous diseases to which grain is subjected, move in cycles, appearing and disappearing regularly, as has been stated in regard to the fly. In reply to a question—why rusted wheat, cut when in the dough state, becomes plumper than that left? he replied that the sap goes to the grain and nourishes it, if it is cut when green. He cuts his and puts it in good shocks immediately after the reaper; there is no danger of it moulding from the sap only, but if heavy rains come it may, though he has never had any do so. The past has been the most peculiar season in many respects we have ever known in Kentucky and furnishes no rule for judging the future. If a good crop of wheat is expected, it must make good progress in the fall; grazing has proved injurious some seasons, but at others it did not appear to produce any bad effect. His best crops have been raised on hemp land, broken up with a two-horse plow as soon as the hemp was off and rolled well. If we could get clover land ploughed up early enough it would be second only to hemp land. His wheat has seemed to do worse in oat stubble than in anything else, but on hemp land the growth was more luxuriant and the rust was more serious than on corn land. Until this year he had never noticed that on western slopes the grain was much thicker. He fears sudden changes of weather in winter when the ground is filled with water, as the freezing and thawing displace the roots.

WORKING BUTTER.

Pat, pat, pat,—roll, roll, roll,
The golden butter in the tray,
It can't endure such beating
Without giving out the whey.
Down in the cool cellar,
Far out in one corner,
Stand Fanny and I;
Patting the butter,
Ready for market—
The rich golden butter;
The nice flavored butter,
Made by Fanny and me.
Shall we stamp it with Rose,
Or stamp it with Apple,
This beautiful ball,
That stands so high!
I think we'll impress it,
With a Cow—as she made it.
And thus we did do it,
Both Fanny and I.

Lizzie, in Boston Cultivator.

SHORT-HORN SALES.—We learn from the *Country Gentleman* that Mr. B Sumner, of Woodstock, Conn., has recently sold to Richard Goodman, Esq., Lenox, Mass., the cows Laura 5th and Snowdrop; to Dr. Okie, Providence, R. I., the heifer Countess of Antrim, by 2d Earl of Carlisle 2804; to Capt. Richard Vaughn, Greenfield, R. I., cows Alice and Pitt 2d, by Fancy Boy 2839—also bull calf Neptune, by 2d Earl of Carlisle 2804; to Augustus Whitman, Esq., Fitchburg, Mass., yearling heifer Rosette, by 2d Earl of Carlisle 2804, and bull calf Baron, by Rosy Duke 6142, out of Baroness, by Barrington; to R. O. Storrs, Mansfield, Conn., bull calf Colfax, by 2d Earl of Carlisle 2804, and bull calf Prince Consort, by 2d Earl of Carlisle.

—D. F. Appleton, Esq., Ipswich, Mass., is breeding the Kerry cattle which were imported by Mr. Sanford Howard in 1860, for Mr. A. W. Austin, of West Roxbury. We learn by the *Country Gentleman* that Mr. Appleton has sold to Mr. Stiles, Skaneateles, N, Y., the yearling heifer "Biddy;" to Mr. Samuel Sinclair of the N. Y. *Tribune*, the two-year old, "Ruby," and to Mr. E. B. Perry, Providence, R. I., the cow "Dido."

BELMONT ECLIPSE.

BELMONT ECLIPSE.

This cut represents the horse that took the first premium on Thoroughbreds at the Exhibition of the New England Agricultural Society at Concord, N. H., three years ago. He stands sixteen hands high, and weighs 1075 pounds. He was bred, and is still owned by Winthrop W. Chenery, Esq., of Belmont, Mass. His color is a rich golden chestnut; he has a clean, neat head; strong, oblique shoulders; short, strong back and loins; very long hind quarters; powerful, well-let-down hocks; flat, wide sinewy legs; faultless feet; and throughout a full share of bone and muscle. He is good-tempered, tractable, and possessed of remarkable speed and endurance. Four *first prizes* have been awarded to him by different New England Agricultural Societies. His pedigree shows that he was got by imported *Balrownie*, out of *Meg Merrilies* by *Leroy*, dam by *Black Snake*, and he by *Lee Boo*, &c., from which it will be seen by those familiar with the stud history of England, that Belmont Eclipse unites the blood of some of the best races of the English horse.

BELMONT ECLIPSE.

EXTRACTS AND REPLIES.

COLTS RUBBING THEIR TAILS.

I have previously had some trouble with itchiness in my horses, and now have a colt, worth five or six hundred dollars, that has rubbed most of the hair from his tail. If you can prescribe something to remove the difficulty and to restore the hair, it will be worth much to me and to others whose horses are similarly afflicted. S. F.

Ripton, Vt., Aug. 7, 1868.

REMARKS.—After speaking of the mange, Mr. Youatt remarks that every case of itchiness of the skin should be regarded with suspicion. When a horse is seen to rub the root of his tail, or his head, or neck, the parts should be carefully examined. If the roots of the hair where it has been rubbed off remain, and there is only redness and not scurfiness of the skin, it probably is not mange but only the effect of lice, or inflammation, or other unhealthiness of the skin.

But as our correspondent says nothing about the state of the skin of his colt, or of its rubbing any other part of its body, we are inclined to the opinion that the rubbing of his colt is caused by worms in the rectum and not by lice or disease in the cuticle. This point, however, should be decided before any medical treatment is attempted.

An inquiry, similar to that of our correspondent was made in the *Country Gentleman* some two or three years ago, which lead to the expression of the opinion of several horsemen on the subject, most of whom ascribed the difficulty to worms. The effect of Ascarides in children and adults is well known, and it is believed the horse is similarly afflicted. An Illinois horseman replied that he would warrant a cure by a daily rubbing with the stable rubbing cloth, with greasing or oiling with the finger or swab the seat of the disease. He also recommended giving a few clean wood ashes, some salt and a teaspoonful of rosin in the oats three times a week for one or two weeks.

A New York horseman recommended the following,—to be administered once a day, on an empty stomach, to be followed by a mash of shorts well seasoned with salt,—

Castor Oil	12 ounces.
Oil of Wormseed	1 ounce.
Oil of Tansy	3 drachms.

After giving the above for two or three days, or until the worms come away, give the animal *one ounce*, night and morning, in his feed, until the itching disappears, of the following preparation:

Popular Bark	1 pound.
White Mustard Seed, (whole,) Powdered Mandrake, Sulphur, Salt, Ginger, and Charcoal, of each	2 ounces.

WINTER WHEAT.

The first of our glorious harvests, the great, indispensable hay crop, is now secured, to the joy of the husbandman, in better condition than is usual. It is to be feared that spring wheat and other small grains may be a partial failure from the abundant early rains and the late pinching drought. But such failure should not discourage us so far as to induce us not to try again another spring. We must fall back on our *main chance*,—winter wheat, which is far superior in quality, quantity and safety as a crop. It is gratifying to know that more attention is given to this crop by New England farmers than formerly. The time is sure to come when there shall be a wheat field on every farm, as there is now a cornfield and an orchard, and when the money now paid for our barrels of flour shall remain in our pockets, to pay a debt, or buy some needed implement that shall lighten our hard, daily labors in the field.

The New England States, *one and all*, lie on the bosom of this great planet a waste, and almost a desert, as regards the production of wheat, while thousands of acres are raised in latitudes both north and south of us. Even in cold Russia and Lapland this cereal is their main stay. Through the influence of a recommendation of the Governor of Maine, in his message to the Legislature of that State, an act was passed giving a bounty on its growth, and the result will be an immense revenue to the State in a very few years. It is to be regretted that the Govenors of the other New England States have not followed the example of Gov. Chamberlin. Eventually they will do so, and wheat growing will become one of the most profitable and important features of New England farming. If any crop is worth raising in the old States, it is this. We ask the farmer to be up and doing without waiting for legislative encouragement.

Though I may repeat my former advice, permit me to say to new beginners, plough a piece of your mowing field or pasture immediately. A good second crop with the stubble, is almost equal to a clover fallow, or a fair dressing of manure. Harrow and mellow the sod, and get in the seed three inches deep if possible. Soak the seed, and be sure it is the winter variety, in brine by dissolving half a peck of salt in four or five pails of water, ten or twelve hours, and rake it in ashes or slaked lime. This is death to the weevil fly. Sow one

and three quarters to two bushels to the acre, from the first to the tenth of September. A small patch of two or three acres will furnish flour for a good sized family, with fifteen bushels to the acre only. Will farmers give us the results of their experiments in raising wheat? HENRY POOR.

Brooklyn, L. I., Aug., 1868.

BLOODY MILK.

In reply to correspondents in Roxbury, N. H., Fitchburg and South Abington, Mass., who have recently inquired for a remedy for bloody milk, we will say that we think it most probable that the trouble arises from some local cause, rather than from a vitiated condition of the whole system. Milk is so nearly allied to blood, that a slight derangement of the delicate organs might result in bloody milk. It may be the result of bruise or sprain caused by jumping over fences and logs, or of being trodden upon by other cattle while lying down, or of being hooked or jostled by other cows, or abused by boys. It may also arise from a "cold" taken by the cow while lying with the udder on damp ground, or from exposure to the great and sudden changes of our climate. Cows are often crowded too closely in stalls and yards, where they quarrel with each other about their feed, and tread upon and bruise each other when some of them are lying down. If the bloody milk is caused by a bruise, that should be healed; if by inflammation, that should be removed. It may be well to bathe the udder with soft warm water, and administer some medicine. An ounce of saltpetre, dissolved in water, given three times in the course of a week, may have a good effect. The old remedy of a piece of poke root, the size of a small hen's egg, grated or cut fine, and given in oats or other feed, once a day for two days, is also recommended by some. Poke root, however, we believe is less popular with veterinary practitioners than formerly. In our own stock there are cases of bloody milk nearly every year, but it usually continues for only a day or two and then subsides without other medicine than bathing the udder.

HARROWING SWARD LAND.—A COW WITH A COUGH.

I noticed in a recent number of the FARMER an inquiry in regard to harrowing sward land. I will give my method. I use a Side-hill or Swivel Plough, which I prefer for several reasons. Harrow lengthwise the furrows slightly, in order to settle them down; then harrow crosswise, first running the harrow in the direction in which the furrows were turned, going back in the same place, and so continuing, which pulverizes the ground with less labor and renders it smoother than can otherwise be done.

I have a cow which has been afflicted with a cough for the last nine months, with discharge of a thick matter from the nostrils, but which does not appear to affect her general health materially. Will you or some one else give me the cause and remedy through the medium of the FARMER?

A SUBSCRIBER.

East Hardwick, Vt., Aug. 10, 1868.

REMARKS.—A cough is not a disease; it is simply an effort of nature to throw off one. Still, in common language, we may say that there are few things more dangerous or alarming than a cough, in man or beast. How many "colds," that with proper care and treatment might have been broken up and cured at the commencement, end in fatal consumption. So with cattle, a cough that might have been removed at first by warm housing, a few mashes of bran or shorts, plenty of roots or other green food, frequent currying, or perhaps a dose of physic, ends in serious inflammation of the lungs. Dr. Dadd says the first object is to induce action to the surface by friction and counter irritants, and recommends that the throat, and feet if necessary, be well rubbed with a mixture of olive oil 4 ounces, oil of cedar 1 ounce, and liquid ammonia half an ounce. Then give a dose of powdered liquorice one ounce, composition half a teaspoonful, in a quart of gruel, to be repeated two or three times during twenty-four hours. A drink of any warm aromatic tea, such as penny-royal, catnip or aniseed, may be useful. Mr. Youatt says that an epidemic cough that was very fatal in England in 1830–31, was caused by the small passages of the lungs being absolutely choked by myriads of little worms.

CHERRY LEAVES POISONOUS FOR CATTLE.

Noticing in the FARMER of August 1st, by your answer to an inquiry relative to the cause of a disease among certain cattle, that you think were poisoned by eating cherry leaves, I wish to know to what kind or kinds of the cherry you referred; and whether the poisonous properties are confined to one species or belong to the whole.

This is a subject which I think may well merit attention, as the wild cherry, especially the black and red, grow in great abundance here, and there is a ready access to it in the pastures for stock of all kinds. J. P. CARR.

Waterford, Vt., Aug. 5, 1868.

REMARKS.—From statements of cases of fatal poisoning by eating cherry, leaves, it appears that both the wild and tame cherry at some seasons, and under some circumstances, are poisonous. It is supposed that they contain *Prussic Acid*. It has been supposed by some that they are dangerous only when wilted, but cases have occurred in which the green leaves have poisoned animals. A farmer in Plymouth county, Mass., who had three cows killed in one day by eating the wilted leaves from a wild cherry that had been blown down in the pasture, some time afterwards finding that the cream from his milk would not make butter as usual, suspected his cows had eaten something injurious. He therefore watched them, and found that as soon as they were let into the pasture the cows went to the wall and commenced browsing some cherry trees within their reach. The cows were removed to another field, and in a few days the milk resumed its proper quality. A lady informed one of the editors of the FARMER that a dose of half a pint of vinegar and two tablespoonfuls of chalk had proved effectual in several cases of cherry poisoning. It is probable that the cherry leaves are poisonous only, or mainly, at a certain stage of their growth or development. As salt is

useful in cases of poison from stings, &c., Mr. Cole suggests its use when cattle are poisoned. Possibly well salted cattle may have less appetite for cherry leaves.

NUTS ON A GRAPE VINE.

Accompanying this please find a piece of a grape vine with a cluster of nuts or something else. There was another like cluster next them on the same vine. I do not know how to account for it, and should be glad to hear from you or some of your readers a solution. We are informed in Scripture that "men do not gather grapes of thorns, or figs of thistles;" but we have in this something that appears to be nuts from grapes.

LORENZO BROWN.

West Northfield, Vt., Aug. 7, 1868.

REMARKS.—This probably is simply one of those monstrosities which are occasionally seen in the vegetable kingdom, and which have parallels also in the animal world, but for the production of which naturalists are not able to give a satisfactory reason. We generally content ourselves by saying, "they are out of the common order of nature"—"unnatural productions," &c. In this case, instead of a bunch of grapes, we have a "bunch" of something that has somewhat the appearance of immature hazel-nuts. On opening the nuts we found that many of the seeds which they contain had been eaten into by a very small yellow maggot. The eggs from which they hatched may have been laid in the embryo grape and produced the irregular growth, or these worms may have been bred in the abnormal development. We have heard of similar cases before, and hope that some grape grower will give Mr. Brown a more satisfactory explanation of this freak of his vine.

WHITE SPECKS IN BUTTER.

Having read in the FARMER of July 4 and 18, different opinions as to the cause of what we call striped butter, all of which I think are erroneous, I beg leave to express my conclusions. I have long been satisfied that there is but one cause and one remedy. If the butter is worked thoroughly after it is salted, it will not be striped. You may not believe this at first, but if you taste of the white spots, you will find they are perfectly fresh. The butter is oftener striped in very warm weather, when the hands, by softening it, prevent its being worked properly. Did any one ever keep the "spotted butter" in a cool place twenty-four hours, then work it till it was waxy, and find any white specks in it? If so, it is not what we call "striped butter."

S.

Waltham, Mass., July 18, 1868.

SHOE-BOIL.

I notice in the Monthly FARMER an inquiry for information as to the best method of treating a shoe boil, or swelling caused by the shoe, or, as some say, the frog of the foot, when the horse lies down. With no pretensions to any great experience as a horseman, I feel that I ought to communicate a "method" which proved entirely successful with me in a very bad case.

To reduce the swelling I applied a solution of saltpetre and vinegar. But the real cure is effected by a contrivance which prevents the animal from folding the foot in such a manner as to cause the trouble. This I do as follows: I make a strap long enough to pass around the foot, close down to the heel of the shoe, with the buckle in front. Through the part of the strap which comes on the frog I drive outwardly, four or six sharp nails, which should stick through at least half an inch. I then stitch another piece of leather over the heads of the nails to keep them firmly in place. With this spur snugly buckled on, the patient will be careful, after the first experiment, to turn the foot out where it belongs when it lies down. Don't raise a hue and cry about the inhumanity of this arrangement for you will never be able to discover a sign of a scratch, nor will the beast lose a night's rest.

G. H. ARNOLD.

Braintree, Mass., Aug. 10, 1868.

REMARKS.—We are much obliged for the foregoing practical method of curing and preventing shoe-boil, and take pleasure in publishing it for the benefit of horse owners generally.

SANBORN HILL, N. H.

What is known as Sanborn Hill was settled by two brothers, Jonathan and Joseph Sanborn, from the town of Hawk, now Danville, and is about one mile square. It contains eleven families. Five of these eleven families made the past season four tons one hundred and fifty-four pounds of maple sugar. As the Sanborns have almost all left the Hill, would it not be well to change the name to Sugar Hill? I made twelve hundred pounds from two hundred and fifty-four trees.

JOHN S. SANBORN.

West Springfield, N. H., July 21, 1868.

REMARKS.—We think the change would be very appropriate. But as "he who hath builded the house hath more honor than the house," are not they who made the sugar entitled to more credit than the hill on which the trees grow? What say, then, to changing the names of the people instead of the hill? Mr. Maple sugar, Mrs. Crystalline Syrup, and the young Cakes, might, like all new words be a little awkward at first, as were probably such names as Smith, Joy, Sweet, Black, Lightfoot, Carpenter, Mason, Fletcher, Woodward, Grey, &c., when first applied to individuals; but time, which mellows all things, would soon familiarize them to our use.

SHORT-HORNS IN VERMONT.

Knowing that there is always a desire among the stock men of the different sections of country to know what there is in other localities, by those engaged in the same business, I will give a brief account of some of the herd of Short-horns of D. R. Way, as I saw them recently. His herd is not so large as that kept by him previous to his removal from Landgrove to his present farm, in the north-eastern part of Rockingham, Vt. At the head of the herd stands the superb bull, Earl of Oxford, bred by J. O. Sheldon, Geneva, N. Y., by Third Lord of Oxford, dam, Third Maid of Oxford. Earl of Oxford is two years old; won the first prize at State Fair last year; possesses fine handling qualities, great depth and breadth of brisket, perfect straightness, and great breadth of back; high head, with a majestic stylish look rarely seen. He is a fine feeder, has great constitution, and possesses altogether, a fixity of type that is sure to make its appearance in his calves. He will turn seventeen hundred pounds, and is unquestionably one of the first bulls in the New England States, as the stock he leaves will show.

Third Lord Oxford has four consecutive duchess

sires in his pedigree of that family. Of him an English herdsman truly remarked, he is the handsomest bull he ever saw. He never left a poor calf, as any one can readily believe who visits the White Spring Herd, or that at the Cornell University.

Among Mr. Way's lot of extra cows, we noticed Constance Third, a finely made cow, a good milker, and good for stock, as her calf, by Second Duke of Geneva, about ten months old, will tell. He has six other young calves by Earl of Oxford that do him much credit, besides some yearlings and other stock. We also noticed a large yoke of oxen, fat enough for market any day. H.

Londonderry, Vt., Aug. 20, 1868.

THE SHENSTONE TREE SOCIETY.

As several of your correspondents have spoken of the utility of shade trees by the road side, perhaps a brief account of the "Shenstone Tree Society," may be interesting to your readers.

This society, named for the celebrated poet gardener William Shenstone, was instituted in this town some twelve or fifteen years ago, and has for its principal object the setting of shade trees along the streets. Money for this purpose is raised in various ways, but chiefly by the monthly meetings of the society. The entertainment, consisting of music, select reading, dramatic performances, lectures, &c., is usually of a high order, and the meetings are well attended. A small admission fee is charged, and the proceeds appropriated to the purposes for which the society was formed. Several worthy objects are thus gained. The meetings are a source of innocent pleasure to young and old; youthful talent has here an opportunity to try its wings, while the many trees which adorn the streets of our ancient town, as well as other works of improvement bear testimony to the labors of the society. In the years to come, when the trees shall have attained their full sizes, these labors will be better appreciated than at present.

Marlboro', Mass., Aug. 1868. Mattie.

GROWTH OF CORN AND RASPBERRY CANES.

This season I picked corn suitable for boiling in sixty-four days from planting; in another field, seventy days after planting, some of the ears were "specked;" and in eighty days it was difficult to find an ear soft enough to boil. The seed was shelled from the ear the day it was planted. Last season I picked corn suitable for seed in seventy-four days from planting.

On the 6th of August, I cut a cane of common red raspberry on my farm, measuring 11½ feet,—the growth of the present season.

A. B. Carpenter.

West Waterford, Vt., Aug. 17, 1868.

MILK-ROOM AND ICE-HOUSE.

I am intending to build a milk-house this fall, with an ice-house in connection. Will you, or some one of your many subscribers, give me a *plan* for building the two combined? O. P. K.

North Hero, Vt., Aug. 21, 1868.

Remarks.—We are glad to see that farmers are considering the importance of the subject of milk-rooms. While "watching" with a sick man during one of the nights of the late excessively hot weather, a little milk was wanted about three o'clock in the morning. The milk of three or four cows had been placed in the pantry, which opened from the kitchen, the evening previous; but on going to it, every pan was found to be thick at that early hour. The disheartened tone with which the good woman of the house remarked, "there is no use in straining our milk; we might as well turn it into the hogs' trough first as last," impressed us very forcibly, as well illustrating the importance to every farmer of a suitable milk-room.

We do not know why the conveniences of an ice-house and milk-room may not be combined, either in a separate building, or as a part of the ell or other portion of the house, but we have no definite plan now on hand, though we will bear the subject in mind.

With these remarks we hand over the inquiry "O. P. K.," to the readers of the Farmer, and hope that his request will be attended to at once. In the meantime we publish in another column a plan for a "spring house" which may afford some valuable suggestions on this subject.

PRESERVING TOMATOES.

Tomatoes picked when ripe may be kept an almost indefinite length of time, by putting them into pure cider vinegar, reduced by adding two gallons of water to one of vinegar, and kept either in stone or wood. If careful not to displace the stems or break the skin, they will come out almost as fresh as when first picked.

TOMATO PIE.

Tomatoes treated in all respects as apples, only adding a little flour to absorb the juice, make better pies than apples.

ELDERBERRY PIE.

Elderberries make a first-rate pie. Season well. Make sweet.

SUMMER SQUASHES

Should not be used until the rind is so hard that you cannot easily stick a knife into it. Then dress and treat in all respects as you would a winter squash. Very few would suspect them to be anything else.

I have tried all of the above methods for years, with much satisfaction, and they are now submitted to the readers of the New England Farmer.

W. P. Woodward.

Maplewood, Mass., Aug. 19, 1868.

DRYING GREEN CORN.

Mrs. Lima Sherman, of Canisteo, informs the New York Farmers' Club that she prefers corn dried without boiling, as she thinks the water extracts much of the sweetness of the corn and renders it insipid. She directs to shave the corn from the ear, taking care to cut it as near in center of the grain as may be, scraping off what remains on the cob. Butter your dishes, spread the corn an inch and an half thick on each dish, set it in your stove oven, scald it thoroughly, taking care to stir it frequently that it may not scorch. You may now finish drying it around your stove; the oftener it is stirred the sooner it will dry. It should be put up in paper sacks and packed away in a dry place.

GOOD CROPS OF HAY.

While cutting the grass on two patches of my farm, on the 18th of July, I think it was, my men spoke of the large yield, and as I now have one of Fairbanks' best scales set in my barn floor, I

thought I would weigh the hay alluded to. One lot of 43 square rods was a piece of wet land enclosed by my garden fence. The hay on this lot, when well made, weighed 1860 pounds. The other lot measured 215 square rods, and was also originally wet ground, and the crop here weighed 9946 pounds. Both of these pieces had been drained, the largest piece by 39 rods of ditching. To both of these patches I applied last fall a dressing equal to about 25 loads to the acre, that I compost principally from muck. When I commenced reclaiming the low piece of 215 rods, it did not produce 10 cwt. of hay. I do not give these weights because I think the produce remarkably large this year, for I think I have cut as large or larger crops in previous years, but I never weighed them before, as I had not the convenience for so doing, which my scales now afford. O. Foster.

Tunbridge, Vt., Aug. 15, 1868.

AGRICULTURAL ITEMS.

—The *Western Rural* says that the parings of cucumbers will disperse roaches.

—There are said to be over 250,000 seeds of red clover in a pound.

—Love's labor lost—a hen setting on wooden eggs.

—Early hatched chickens make early layers next winter.

—They have big trees in Australia. One was lately cut down there, nineteen feet in diameter and 330 feet high.

—Dr. Franklin introduced broom corn into this country, previous to which brooms were made of evergreen boughs, peeled birch, &c.

—The Iowa *Homestead* has accounts from various parts of that State of large crops of wheat, corn, vegetables, and—grasshoppers.

—To whiten straw hats, scrape stick-sulphur with a knife, mix the powder to a mush with water, plaster it thickly over the straw, place in the hot sun for several hours, brush off when dry.

—At a meeting of the St. Louis merchants on 'Change, a resolution was adopted that after Aug. 1, thirty-two, instead of thirty-five pounds of oats should constitute a bushel in that market.

—The Belvidere, Ill., *Standard* says that several farmers in that vicinity complain that their Osage Orange hedges were injured last winter, although they were six or seven years old.

—The first shovel ever manufactured in Fairfield County, Ohio, was put up at auction by the makers, Messrs. Motherwell & Co., and sold for $45. That's encouraging home industry.

—"Brief is the mission of the fragile flowers;
Some droop and die e'er close the sunny hours;
Still some with vigor lift their lordly heads,
Imparting splendor to their cultured beds."

—In whatever you engage, pursue it with steadiness of purpose, as determined to succeed. A wavering mind never accomplished anything worth naming. There is nothing like a fixed, steady aim. It dignifies your nature and insures you success.

—John Howe, says, in the *Western Rural* that he has been successful in preserving his cabbages from the attacks of the "flea" by putting upon the plants water in which potatoes had been boiled.

—Where bees forage on grazing lands, all the honey they get is so much sweetness and nutriment taken from the pasturage. It is not certain that the loss is not a serious one to the dairy.

—Sheep are said to be so plentiful in Australia as to be sold by travelling butchers at a cent a pound, and in two colonies alone no less than 60,000 are boiled down each week.

—A correspondent of the *Canada Farmer* says the Alsike clover seems to do best in ditches or holes where the plants are nearly or quite covered with water in winter and spring. This is a marked advantage over the red clover.

—Farming is a trade; and a man has to learn it, however much he may know; the knowledge must be applied, and made the man's business. He cannot learn it in a day, but must expect to improve constantly.

—An egg beat up with a teaspoonful of molasses and a large teaspoonful of ground black pepper, and set where flies can get at it, will thin them out rapidily, according to the experience of the *Western Rural.*

—A Lorain county correspondent of the *Ohio Farmer* says that during the late excessive heat and drought, cows dried up nearly one half in yield of milk, but not that difference was made in the product of cheese. On short feed, milk is much richer than on a flush growth of grass.

—A prize of a silver pitcher was offered by an association at Milledgeville, Ga., to the one who should raise the greatest number of bushels of wheat to the acre. Eighteen persons competed, the largest yield being forty-three and three-fourths bushels, the next nearly as large, and five of the eight being above thirty-six bushels.

—Dr. Trimble recently informed the New York Farmers' Club that "the canker worm has of late disappeared from New England." It is true that comparatively few were seen last year, but we are sorry to see that several orchards in the vicinity of Boston now bear unmistakable evidence of the re-appearance of this destructive pest.

—A Minnesota paper states that a new bug has made its appearance in that State, whose mission seems to be to destroy the potato bug. It is described as being flat, one-third the size of the potato bug, and yellow or reddish, with black spots. Its mode of operation is to thrust its sword-like proboscis into its victim, which is then dragged off to be devoured at leisure.

—The American Farmers' Magazine closes an article with the following statement, which we commend to the attention of those farmers who

are disposed to change their system of farming to conform to every fluctuation of prices:—"The farmer who would make his business pay, must have a policy and must adhere to it."

—H. Capron, Paris, Province of Ontario, assures the *Rural New Yorker* that he succeeds in keeping his grounds clear of the stripped bug, by pulling up and burning the vines, as soon as done bearing, with the weeds which grow among them, and burn them all up clean, believing that he thus destroys the eggs or germs of the incoming crop of bugs.

—An appropriation of $2000 was made at the last session of the N. Y. Legislature for the benefit of the heirs of the Rev. Chauncy C. Goodrich, the producer of the Goodrich seedling potatoes. The heirs of Jethro Wood, the inventor of the cast iron plough, have received an appropriation from the same Legislature of $2000, in consideration of the services of their father.

—The remark of Mr. Mechi that he could enlarge very much on the advantages arising from drainage, such as greater and earlier crops, of better quality and easier ploughing, and increased temperature of soil and subsoil, is copied by American agricultural papers, without informing their readers that much of his farm consists of such a stiff, tenacious clay that, without draining, its surface would not be dried during the whole season, by the feeble rays of the sun in that climate.

—A writer in the *Journal of Agriculture* says that for the purpose of determining the propagating power of a plant of purslane, he counted the number of seed pods upon it. There were 4,613. Fourteen of these—seven small, four medium and three of the largest—were selected, and the seeds counted. They gave an average of ninety seeds to the pod, or 415,170 seeds to a single plant.

L. S. Abbott, of Ohio, says, in the *Farmer*, that transplanting has a peculiar effect on the form of the turnip. An experienced eye can determine whether the turnip has been transplanted or sown where it grew to maturity. Transplanted plants always produce turnips of irregular shape with sundry large roots running down into the ground; those not transplanted have a round, smooth bulb, with a single tap root extending into the earth.

—The Greenville (Ill.) *Advocate* says, during last week some five or more boys died very suddenly—supposed to result from eating mulberries. The supposition is that the mulberries were in some way poisoned by the locusts, which have been so plentiful of late. It is also suggested that it is possible that they were stung by those insects,—the sting of which is considered by some as a deadly poison.

—The *Journal of Agriculture* says that peas are an excellent preparatory crop. They mellow the soil, and seem to enrich it also. They obtain their strength, like clover and other leguminous plants, largely from the atmosphere. On this account they are used on barren soil to improve it—by ploughing in. We have had experiments in this way that were highly satisfactory.

—A correspondent in New York city of the *Rural New Yorker*, says the first arrivals in that market of Antwerp raspberries were sold at 75 cents per quart,—prices averaging about 45 cents; Doolittles and Philadelphia were sold as low as 25c; gooseberries $4 to 6 per bushel; currants were taken by the preservers at 18c per quart; wild blackberries at 25 to 30c; Dorchester, Wilson, &c., at 40 to 45 cents per quart. Small fruits unusually scarce and high.

—The *Maine Farmer* is informed by Mr. Amherst Alden, of Bangor, who keeps eight or nine cows and carries their milk to the city, that from his experience in feeding milch cows he is satisfied that cows fed on hay cut from the 5th to the 10th of July, would give nearly double the amount of milk that the same cows would give kept on hay cut from the 25th to 30th of the month. In 1867 Mr. Alden sold something over a thousand dollars worth of milk from nine cows.

—The Pennsylvania *Farm Journal* says that Mr. Oliver P. Stoughton, of Lawrence County, clipped this season from fifty-six three year old Spanish Merino ewes, six hundred and forty pounds of wool; and from a three year old buck of the same breed nineteen pounds. He purchased the sheep some time ago from Mr. Chamberlin, of Rutland County, Vt. He sold the wool at the low price of forty-one cents, and yet the flock netted him over two hundred and seventy dollars cash.

—Cows that hold up milk, Mr. Johnson says can be cured if they will drink sour milk. After drinking, and as soon as they begin to lick the pail, they will give down freely. He has tried it with cows that would give about two thirds the proper quantity, retaining the other portion. Then he gives them the milk to drink, and waits until they begin to lick the pail, when he has no trouble in obtaining the remainder. He has tried meal, salt and various things, but found nothing to produce such an effect as sour milk.

—A correspondent of the *Country Gentleman* gives the following as the origin of the term "deacon" as applied to veal and calf skins. In the early days of cheese making in Herkimer county, there lived a good deacon in the town of Norway, who, like many other good men, had a sharp eye for profit. He fatted and killed many veal calves and sold to the mechanics at the "Corners." The love of gain with the old deacon was stronger than the fear of public opinion, and he did sell or was accused of selling veal quite too young, and so the villagers, by way of reproach and ridicule, called his veal "deacon" veal, and from this the term began to be applied to young calves, and has spread, and is used quite generally in dairy sections. Young calves are "deacons;" when killed they are "deaconed," and calf skins are "deacon skins."

MANAGEMENT OF ROADS.

UNLESS there is considerable wealth in the neighborhood, we cannot expect the inhabitants will be able to construct highways of the best quality. The first cost of the best style of roads would be thought too much for country towns where the population is widely scattered and not over wealthy.

Another reason, too, will prevent most towns from attempting to make such smooth, hard roads as some large towns make, as they have not the material at hand. A hill cannot be found by the road-side every mile, from which can be taken all the gravel needed, of a quality that will pack solid, wear smooth and last long. But deficiencies in this matter make it all the more necessary to exercise a wise skill, both in making and keeping roads in repair. A system should be adopted that would employ the best talent and use the best material within a reasonable distance of the place where it is needed. Knowledge and skill in the management of roads are as essential as good material. A man who knows how will make a fair road with inferior gravel, while an ignorant and careless one will almost inevitably misuse the best.

In order to obtain the best skill for this work, we are decidedly of the opinion that we must give up our present mode of managing the roads. It is poor policy to put this important matter in the hands of seven or eight persons, some of whom will be quite likely to have no qualifications for the business, except a pair of oxen or horses, and a willingness to neglect their regular business for the sake of earning a little ready cash; while others assume the office unwillingly, because their neighbors say, "they must take their turn." Of course, there are some who have better qualifications, and honestly and earnestly endeavor to do the best they know how. It is undoubtedly true of this, as of all other kinds of work, that *experience* improves a man's natural ability and skill, and will enable him to work more economically as well as more efficiently. The experienced worker knows better *what* to do, *when* to do, and *how* to do it.

Under the present system, in most cases a green hand, or at least a fresh hand, takes hold every year, and works away, patching a little here and a little there, with no attempt to carry out any general system of permanent improvement, uses up the money allowed to his district, and then gladly gives place to his successor. And so, year by year, our roads are about as likely to become worse as better.

It is not necessary to suppose, because our roads remain without improvement, that every highway surveyor is incompetent under this system. We believe the *system itself* is faulty, in that it neither demands skill nor gives encouragement or opportunity for its acquisition. The actual question to be solved at our town meetings often is, not who is *best qualified* for this office, but who can be persuaded to accept it?

Now it seems to us that the effectual remedy for this state of things is to give the whole charge, the entire responsibility of expending whatever sums of money the town may choose to raise for highway purposes, to one competent superintendent. He should be a man whose honesty is without suspicion, and one who, if he does not already know enough of the science and practice of road making and road repairing, yet has sufficient common sense and ambition to *learn* how to fulfil the duties of the office in the best way. When such a man is found, keep him in the place just as long as he will serve. Let him make a few blunders if he must; that should be expected in the beginning. It takes a year or two to develop a man's skill and energy in a new business. But even at first, he will not be likely to make so many mistakes as can be detected under the present management. With every years' added experience, his system will become defined; he will improve his practices, and by and by we may hope to have roads that will be a good deal smoother, and that will not so frequently need to be repaired. Indeed, our main roads, on which the chief part of our travel and heavy teaming is done, should be kept in such condition that there

will be no need of such operations on them as we now call repairing.

With regard to *bridges*, a change just as important is imperative. We are constantly constructing new, and repairing old ones, all up and down the thousand streams that penetrate the valleys of New England. The practice fairly illustrates the fable of the rolling stone of Sisyphus, which, when he had rolled it to the top of the hill, turned, in spite of all his power, and went down again! So with our wooden bridges. Gangs of men and teams are ever about them, reconstructing or repairing, and the people impose upon themselves heavy burdens in taxes, which might be averted by an earnest and intelligent inquiry which would certainly lead to more economical action.

It cannot be truly said that we have not yet had sufficient experience to convince us that wood, in damp places is liable to rot in a few years; but we may forget that timbers will in time become too weak to support the weight of heavily loaded teams, and that planks will occasionally become loose, and let children drop through into watery graves. Accidents of this nature *may not* occur once in a century. But it is an indisputable fact that wooden bridges will get old and rickety, and the weak parts are not always found till the crash comes unexpectedly—and then any one can see how unsafe it was, and wonder that it held up so long.

When we are fully awake to the fact that wood is a perishable article, we shall be ready, perhaps, to inquire if there is not some available material, which, by its durability, shall be entitled to a preference in these situations?

There are, already, two stone bridges where we reside. We have not learned how carefully they were built, and so cannot speak of their promise of durability. But if the work was well done, why should they not last a thousand years? And if a thousand, why not ten thousand? The current of our rivers is not swift enough to wear away granite perceptibly, and probably a stone bridge would not be carried away by one of our spring freshets.

In Great Britain there are stone bridges that were built more than a thousand years ago, and still in good condition. There is a stone bridge over the Ipswich river, in the ancient town of Ipswich, in Essex county, that is nearly a hundred years old, we believe, that appears as firm as though finished only yesterday. Surely we have material and skill at least equal to what England possessed ten centuries ago, and could build bridges that would stand as long.

It is not our object at present to say more than to suggest an inquiry into the comparative cost of wooden and stone bridges. No doubt stone would be much more expensive than wood in the first place, but we believe that for a period of even one hundred years, the use of stone would be the most economical.

THE WOODPECKER.

Some have supposed the rows of holes often seen in fruit trees, extending nearly around the trunk, were made by the bird for the purpose of sucking the sap of the tree, and hence the name of "sap-sucker" has been given to the "downy woodpecker." Others have supposed that they were after the small grubs or larvæ of insects under the bark, while some have thought they were mere decoys for the flies often seen around these perforations.

In an article headed "The Woodpecker Question Settled," a correspondent of the *Utica Herald* says the object in making these holes is to get the small ants which are attracted by the sap. This he determined by carefully watching the operations of the woodpeckers, and by shooting a few and examining their crops, which he found filled to their utmost capacity with the smallest species of black ants.

If this conclusion is correct, the foresight and calculation displayed by the little bird in setting and watching his traps may be called instinct, but can we adopt Sir W. Hamilton's definition of that principle, and say that "instinct is an agent which performs *blindly* and *ignorantly* a work of intelligence and knowledge?"

WHAT IS FARMING TO BE?

We recently published some account of a trial in Illinois of a machine with which four men cut and bound an acre of grain in 30, 30½, 34 and 38½ minutes, respectively. We now find in the *California Farmer* an allusion to the steam plough of Messrs. Coffin & Standish, of Martinez, which the editor of that paper saw at work spading up a highway. Though the road was as hard as the travel of

years could make it, the plough moved steadily along cutting up the solid bed finely. It has been frequently tested, and the inventors are still at work making such improvements as these trials have suggested, and are entirely confident of complete success. The *Farmer* remarks:—

The steam plough when completed will plough, plant and finish fifty acres per day, in the best manner; and the engine will also, when attached to their new "Header and Harvester," as it is the intention of the inventors to do, will head, thrash and clean up fifty acres per day,—the Header cutting a breadth of twenty feet wide. When this is accomplished we may, indeed, call it the age of progress.

Call this a dream, if you will. But is it not just as likely to come to pass as are the dreams of the croakers, who see visions only of what is discouraging, degrading, plodding inferior, hateful in the present or future of American agriculture? We have been so long "scared with the dreams" and "terrified with the visions" of this class of prophets, that we take pleasure in recording the more cheerful anticipations of our California friends.

SHALLOW PLOUGHING.

One of "the wise men who concentrate the rays of agricultural knowledge" at the New York Farmers' Club, not long since invented a plough designed to stir up the soil to a depth which ordinary plough-joggers never thought of reaching. Some New Jersey farmers who belong to the society of Friends, took issue with the teachings of this Club as to the advantages of universal deep tillage, and finally asked for an examination of the results of a system of cultivation based on shallow ploughing. A committee was therefore appointed by the Club to visit the grounds of these Friends. We find an account of this visit in the *Rural New Yorker*, by a member of the Committee, marked with the familiar initials "T. C. P." from which we give the following paragraphs:—

The next day we were taken into carriages and driven over the surrounding country, and to several farms where shallow ploughing had been practiced for many years. They call from four to six inches shallow,—their average is about four. Though the season was both backward and dry, they had made good harvests, and I was much astonished to see the evidences, in large and numerous stacks and a heavy stubble, of crops of wheat, oats and rye that would have done no discredit to the wheat lands of Western New York. The clover would compare favorably with the best I have seen in that favored region. The soil is a loamy alluvion resting on an ocean drift; the surface slightly undulating, and requiring draining only in the bottoms bordering streams.

On the bottoms where the tide overflows are some fine redtop or herdsgrass meadows, which are protected by embankments. These meadows are a great source of profit to the owners, as more than one-half of all the redtop seed raised in the Union is grown here. Those who have these meadows generally keep cattle.

The course of farming now usually adopted, after more than one hundred years' experience, is wheat, clover, corn, oats, rye or wheat, followed by clover again. The first crop of clover is cut for hay, followed by a crop for seed, then pastured by sheep. Sheep are usually bought in October, the ewes then stinted to the ram, and kept in good condition; lambs sold as soon as the butcher will take them, and the ewes follow as soon as fed up to marketable condition. This is their favorite course, and on this they increase the fertility of their soil and grow rich. I saw a portable steam engine driving a threshing machine at a group of stacks, and understood that it is generally used.

My impression is that I have seen no portion of the country where a system of farming, based upon clover, can be so profitably studied as in Salem, Co., and around Salem City. It has been longer and more persistently practiced than in the winter wheat region of Western New York, and presents much the same results—highly cultivated farms, elegant buildings, and a refined and intelligent society. In such a soil as theirs, deep ploughing is not desirable, because they get the immediate advantages of their clover sod, and the soil does not require the ameliorating influences of deeper culture.

DISEASE IN THE STABLE.—The North British *Agriculturist* attributes much of the disease in stables to the exclusion of the necessary quantity of light, a fair share of which is deemed as essential to animal growth as to vegetable. When stables or other inclosures are kept in comparative darkness, filth is apt to be overlooked, from which unwholesome gases are continually exhaling, rendering the air unsuited to the demands of animal life. This conclusion is, in every respect, a reasonable one, and should challenge the attention of every stock grower. Extreme darkness or garishness—especially in the case of fattening animals—is to be avoided, as along this medium line runs the pathway of healthfulness to stable stock and of profitableness to the owner.

MASSACHUSETTS AG'L COLLEGE.

We learn from the *Amherst Record* that the new buildings will be ready for use at the opening of the new year, Sept. 10th, and that Prof. Miller and family have arrived from Chicago. The *Record* also says:—

Dr. Calvin Cutter, well known before the war as the author of Cutter's Physiology, and since, as surgeon of the 21st Mass. Vols., and brigade and division surgeon on the staff of the gallant General Reno, will deliver a course of ten lectures to the students of the College, during the next term, on the "Laws of Health."

Dr. Jabez Fisher of Fitchburg, a prominent agriculturist of the State, and for many years a member of the Board of Agriculture, will give ten lectures upon "Market Gardening."

Hon. Charles L. Flint, Secretary of the Board of Agriculture, will deliver, in November next, a course of ten lectures on "Dairy Farming."

Hon. Marshall P. Wilder will lecture upon the "Modes of Hybridizing and Improving ornamental and useful plants."

There will also be courses of lectures during the fall and winter, upon Comparative Anatomy, the Diseases of Domestic Animals, and Chemistry. During the summer term, there will be lectures upon Botany, Zoology, Organic Chemistry and Agriculture. Besides which practical instruction will be given in Book-keeping, Surveying, Analytical Chemistry and Drawing.

For the New England Farmer.

WESTERN FARMING.

Although I am not a farmer just now, I am still interested in all that pertains to that occupation. For more than twenty years I was actively engaged as a farmer in what used to be called the "Genesee Country," lying between the Genesee river and Buffalo. Ill health made it necessary for me to change my business. I changed my location from Wyoming County, N. Y. (Warsaw,) to Maplewood, Mass, my present residence. I overworked, and was not careful to observe the laws of life, as far as I understood them. This resulted in one of the worst forms of "nervous dyspepsia," and so prostrated me that I was of little use to myself or any body else, until I tried the "Turkish Baths" on Essex Street, Boston. After having continued their use over a year, I am now able to attend closely to business, besides doing considerable hard labor.

One needs to go West and spend at least a year among the farming community to have a correct idea of western farms and of western farming. There is land on the "flats" of the Genesee river that has been tilled nearly or quite one hundred years, and not one bit of manure has ever been used upon it, and is still too rich, if anything. Gen James Wadsworth, who fell in the battle of the Wilderness, owned thousands of acres of just such land, and it used to be said that he could travel from his residence, (Geneseo,) to Rochester, on his own lands, a distance of over twenty miles.

Farmers west obtain very large returns for their labor, when properly applied. A man and a boy of sixteen years of age would frequently do the work on one hundred acres, cultivating from twenty-five to forty acres of winter wheat, with spring crops, such as oats, barley, corn, potatoes and grass. This before the mowing machines and reapers came into use. With the help of only two boys, one twelve and the other fifteen years of age, I once had the care of 200 acres, with a harvest of over 100 acres. Our ploughs were drawn by three horses, rather than one, as we often see here.

Deep ploughing and good cultivation usually gave us good returns. One hundred bushels of shelled corn, 70 bushels of wheat, 100 of oats, 75 of barley, or 600 of potatoes have been raised upon an acre. The amount raised from fifty acres, with only the ordinary management, was often astonishing. Since the introduction of machinery, a large amount of the hard labor is avoided.

Millions of acres of land equally rich, wait to be cultivated. And how strange that so few of the young men of Massachusetts strike out for a home and a competency, with all the blessings attendant upon a rural and farming life. Go on to this rich land, men and *women* too,—for we have women farmers who claim their "rights," don the "Turkish dress," and work out of doors. A lady with two daughters, near Buffalo, N. Y., carries on a large farm with more than ordinary success. They do their own ploughing, drive their team to sow, reap and mow, with no regular man's help, but with most perfect success.

Emigrate, emigrate, then, ye homeless. Don't regard it beneath your position to work the soil. Look to the future good of this already great country, as well as to the improvement of your own circumstances. In and about our large cities, crime and immorality are rampant. "Where shall the man be found who fears to offend his God." Oh how many, very many fall out by the way. Young men and young women, as you value the prosperity of your country and your own highest happiness, escape from the immoral influences of city life. Build you up a home where there is little to excite the evil passions of men, and where, with proper care, you may have health, competence and as much enjoyment as can be secured here below. Wm. F. Woodward.

Maplewood, (Malden,) Mass.,
Aug. 17, 1868.

For the New England Farmer.

THE PEACOCK.

Your cut of the peacock in the Farmer of Aug. 15th, has a very striking resemblance to the bird in question, and with the richly changing hues, which characterize their plumage, added, I think it would be true almost to life. But in reading the article below I can but think you have, unwillingly it may be,

libelled this bird of all beauty. You say, 'it has been charged with having the plumage of an angel, the voice of a Devil, and the stomach of a thief."

The first and second charges I shall not attempt to refute or deny, for I have never seen even the wings of an angel, nor has his lordship, the Devil, ever piped his voice in my hearing. But the charge of having the "stomach of a thief," I consider a *foul* slander. On the contrary it possesses a most delicate and fastidious appetite. We have had one on our premises for twenty years, and part of that time two, three or four, as the case happened to be; and I would as soon think of charging them with relishing young lambs, calves, or even children, as "chickens, ducks or goslings!" Never was a grosser mistake made, if those we have had the care of are fair specimens of their race. They are smaller eaters I think, for the body they have to sustain, than any domestic fowl I have ever noticed. We have but one now, and he picks almost as daintily as any canary bird. The cost of keeping him would not exceed that of any common hen, though he is much larger. He often visits our neighbors, and I am quite sure he is no unwelcome guest, which he certainly would be were he the glutton represented in your article.

The only objection made against him is his disagreeable voice, which can be heard in a still morning two or three miles, and one not acquainted with it might think it proceeded from some child in distress. But to me even his voice has a charm, inasmuch as it keeps the hawks away from the chickens, and the crows from the cornfield.

His plumage is universally admired. Many of the feathers when full grown are more than a yard long. He seems to be justly proud of displaying his charms to the greatest advantage on a bright and sunny day; and on a rainy one, or when he goes through the wet grass or mud, he will as carefully raise his trail from the ground as a fashionably dressed lady does that of her silken dress.

Young chickens of any kind attract his attention, but instead of devouring them, he is apparently desirous to become their protector. He will even drive away the mother and watch over them himself. But if Dame Partlet, arming herself with all her powers, succeeds in keeping him at bay when she first comes out with a young brood, he accords to her thereafter all her maternal rights;—though as he retreats in acknowledgment of his subjection, he looks back upon the young brood with evident admiration and it may be too with a little regret that he cannot force the mother to resign her charge. But he was never known to harm one of these little ones in any way.

If a shower be gathering in the distance, or if a storm is approaching, he usually notifies us with his shrill voice, in frequent screams. Having known the Peacock from childhood, we have become much attached to him; anp even his voice, which is counted as his greatest, if not only failing, is not unmusical to our ears. And so, as a friend to the Peacock family, I have attempted to refute what I consider a libel upon its character.

C. W. M.

West Gardiner, Me., Aug. 20, 1868.

Remarks.—We are always pleased to have unfavorable impressions of either persons or things corrected, and are therefore so well pleased with this defence of the Peacock's habits and disposition, that we shall attempt no justification of the "foul" and "libellous" aspersion on its character which accompanied its *carte de visite*, but hope that henceforth the whole Peacock family will so conduct themselves as to justify the good opinion of "C. W. M.," and all the numerous admirers of the gay feathers of this beautiful bird.

BAREFOOTED BOY.

Blessings on the little man,
Barefoot boy with cheeks of tan;
With thy turned-up pantaloons,
And thy merry whistled tunes,
With thy red lip, redder still,
Kissed by strawberries on the hill;
With the sunshine on thy face,
Through thy torn brim's jaunty grace;
From my heart I give thee joy—
I was once a barefoot boy!
Prince thou art—the grown up man
Only is Republican.
Let the million-dollared ride;
Barefoot trudging at his side,
Thou hast more than he can buy,
In the reach of ear and eye—
Outward sunshine, inward joy—
Blessings on thee, barefoot boy!—*Whittier.*

A SPRING OR DAIRY HOUSE.

I constructed a spring-house during the summer of 1861, which has been very much admired, and believing it to be very perfect in principle, I will describe it for the benefit of your readers. This house is for a small dairy; it will accommodate but twenty pans or crocks, that are fifteen inches in diameter each, though its capacity may be doubled without increasing the size of the house, by placing another sink for water twelve inches above the one I shall describe, supported in the same manner, and allowing the water to flow into the uppermost one first, thence to the lower one. The building is circular, ten feet in diameter on the inside, and has a ten feet ceiling.

The wall may be of brick or stone. If of brick, it need be but nine inches thick; if of stone, eighteen inches thick.

The floor to be cemented on the earth. The building to be located below the spring, so that the water will flow through a pipe to the

height of two feet nine inches above the floor of the dairy room. The water is received into one end and discharged at the other end of the sink in which the pans of milk are set.

The sink is the shape of a horse-shoe, the opening at the heel being placed in front of the door. It is of iron, eighteen inches wide at the top, and thirteen inches at the bottom, and twenty-six feet long. It is supported on iron brackets, set in the wall of the building, two feet six inches from the floor, and being circular in form, and surrounding the interior of the building, is most conveniently located.

In the absence of both bricks and stones, it may be a double frame building, with an air space between the two frames. In the use of a frame building, it should be constructed by laying two foundation walls, with a four-inch air space between them, which should extend at least two feet below the surface of the ground, as it is at that point that the heat is conducted into the building more than any other. The other foundation wall should be laid at least eight inches above the surface of the ground. The floor should be built the same as in the brick or stone structure.

The exterior of the building may be lathed and plastered, or sided with boards. In either case, the side of the outer studs should be lathed and plastered before the inner ones are erected, and the interior should be neatly plastered and lime-washed. If arranged thus, this building will be found equal, if not superior to one of bricks or stones.

The ventilation should be effected in the manner I shall describe, whatever may be the material used in construction. The mode of ventilation which I use is an original idea, and the action of it just the opposite of that used in ventilating heated buildings, or where the air within is warmer than that without the building. The cold spring water used for cooling the milk, if it is allowed to flow in and out perpetually, as it should, has the effect to reduce the temperature of the building below that of the air without it in summer, the season when the dairy house is used. Hence there will be a circulation downward, if there are openings for circulation both above and below.

I provide the lower escape for the air, by inserting in a building of the size described, eight two-inch glazed draining tiles equally spaced around the building. The tiles should not project within or without the walls, and should be set just below the sink. There should be a space of one inch between the inner wall and the sink, that the air may have free passage over and behind the sink, to the openings in the wall, and to prevent the heat from being conducted from the wall to the sink. The eaves of the roof should project two feet six inches, and the boards with which the projection is ceiled on the under side, should be laid with a space of three-eights of an inch between them, as these are the ingress openings for air. By this arrangement the air is taken into the space between the roof and the ceiling of the room, where all dust that may be floating in it will be deposited before it descends into the dairy through the opening in the centre of the ceiling, where the air is admitted through an ornamental iron lattice, two feet in diameter.

In the downward passage of the air towards the egress openings, it is required to pass over all the milk in the sink, equally, which is of great importance.

A circular marble table is set in the middle of the room on a single iron column, set in the cement floor. On this table the milk is skimmed and the butter worked. This location of the table in the centre of the space surrounded by the sink, it will be seen, is as convenient as it can be, as none of the pans are to be moved more than two and a half feet, to or from the table.

The building being entirely above ground, the carrying of milk up and down stairs is avoided.

The cost of a building constructed of stone, of the dimensions, and with all the appurtenances described, finished in a neat and workmanlike manner, is $225. J. Wilkinson.

Baltimore, Md., 1868.—*Germantown Tel.*

PHILADELPHIA BUTTER.

From a report of a visit to one of the dairies of this celebrated butter-making section, credited to the *Republican*, we copy the following account of the manner of churning and working the butter. On this farm a "spring house," similar to that described above by Mr. Wilkinson, is used.

Churning.

"We rose at half-past four to see the churning and butter-making. The churn is a barrel (bulging only enough to make the hoops drive well), with a journal or bearing in the centre of each head, so that it may be revolved by horse-power. This barrel has stationary short arms attached to the inside of the staves, so arranged as to cause the greatest disturbance of the milk as it passes through them in the churn. At one side is a large opening secured by a cover that is screwed firmly into its place —this is the cover or lid of the churn. Near it is a hole less than an inch in diameter, for testing the state of the churning and for drawing off the buttermilk. This is closed with a wooden plug.

"The churning lasted about an hour, at the end of which time it was necessary to add a little cold milk to cause the butter to gather. This being secured, and the buttermilk drawn off, cold water was twice added, a few turns being given each time to the churn, and when the last water was drawn off it came nearly free of milkiness. A crank was then put on

to an arm of the churn, the horse-power thrown out of gear, and a gentle rocking motion caused the butter to be collected at the lower side, directly over the small hole through which the remaining water escaped. It was left in this condition about two hours. After breakfast we returned to see the working of the butter.

Butter-Worker.

"In one corner of the spring-house stands the butter-worker, a revolving table about three feet in diameter. The centre of this, for a diameter of twelve inches, is an iron wheel with a row of cogs on the upper side of its rim. From its rim to the raised outer edge the table (made of wood) slopes downward, so that as the buttermilk is worked out it passes into a shallow groove and is carried away through a pipe which discharges into a pail standing below. Over the sloping part of the table there works a corrugated wooden roller, revolving on a shaft that is supported over the centre of the table, and has a small cog-wheel that works in the cogged rim of the centre wheel, and causes the table to revolve under the roller, as this is turned by a crank at its outer end. Of course, the roller is larger at one end than at the other, so as to conform to the slope of the table, and its corrugations are very deep, not less than two inches at the larger end. Supported at each end of the roller and on both sides are beveled blocks, which, as the table revolves, force the butter from each end toward the centre of the slope. About twenty pounds of butter is now put on the table, and the roller is turned, each corrugation carrying through a long narrow roll, which is immediately followed by another and another, until the whole table is covered. The roller does not quite touch the table, and there is thus no crushing of the particles. The beveled blocks slightly bend these rolls and crowd them toward the centre of the sloping part so that when they reach the roller again they are broken in fresh places, and by a few revolutions are thoroughly worked in every part.

Final Processes.

"Then follows a process that was new to all of us—the 'wiping' of the butter. The dairy maid (in this instance a lusty young man) turning the roller backward, with the left hand, so that the butter comes through all the right hand side, presses upon every part of it a cloth which has been wrung dry in cold spring water, and which he frequently washes and wrings out. This is continued until not a particle of water is to be seen in the butter as it comes from the roller, to which it begins now to adhere. If there is any secret in the making of Philadelphia butter, this is it; and it has much to do with its uniform waxiness of texture, whether hard or soft.

"After this, the butter is salted (an ounce of salt to three pounds of butter)—still by this machine, and any lurking atom of moisture is in this way prevented from becoming a cause of rancidity.

"When the salt is thoroughly worked through the whole mass, the butter is removed to a large table, where it is weighed out and put up into pound prints.

"The working, wiping and salting of over one hundred pounds of butter occupied about an hour, and before 10 A. M. the entire churning, beautifully printed, as fragrant as the newest hay, and as yellow as pure gold, such butter as only Jersey cream will make, was deposited in large tin trays and set in the water to harden. The next morning it was wrapped in damp cloths, each pound by itself, put in a tin case, each layer having its own shelf, with two compartments of pounded ice to keep it cool, and surrounded by a well-coopered and securely-locked cedar tub, was sent to the Continental Hotel, where we found it on our return as delicious as when it left the farm."

CLEARING MEADOWS.

Scarcely anything in the farming operations of this State, is as a general rule so slovenly carried on, as its meadow lands. It is the exception, to find a meadow free from bushes and stumps and rough spots. A smooth meadow is a beautiful sight. It never fails to attract the attention of the passer by.

In order to get rid of bushes, it is the cheapest way in the end to cut them out by the roots. A clump of bushes on a muck meadow may be cut round, and then a common ox chain thrown around and hitched to the whiffletree behind the horse, and it may be twitched out in a twinkling. A rod of such land once cleared is forever cleared. All projecting stumps and roots should be removed as fast as practicable, so that the horse rake, and even on many meadows the mowing machine may be made to work. A few days spent in this way will add much to the annual value of the farm, as well as to the comfort of the laborer. Let ditches be dug so as to drain out the stagnant water, and a marked improvement will be visible from year to year.

A farmer remarked in our hearing recently, that in his boyhood, farmers did not begin to cut their meadows till the first of September. The consequence was that meadow hay was regarded as scarcely worth the cutting, and such was the fact. He said that when he was old enough to own a meadow, he commenced cutting it the first of August, and his neighbors all cried out that he would certainly spoil his meadow; but he continued the practice, and now has one of the best meadows any where. Lately he has commenced cutting as early as the 10th of July, and his meadow hay is bright and green, the upland grasses having worked in to a considerable extent, and his hay is little, if any, inferior in value to upland

hay. There is as much deterioration in cutting meadow hay late, as upland hay. In either case the best time to cut hay is when the juices are beginning to harden.

Every good farmer will aim at the improvement of his lands every year. Unless he does so, bushes will grow larger from year to year, rocks will appear more numerous on the upland, the pastures will furnish less feed, and in a few years there will be a general aspect of decay on the farm, the fences and the buildings. Neglect will tax us heavily, while thrift will add to our resources without our scarcely knowing it. Then again, whenever we make any real improvement, it stimulates us to do something more. We feel encouraged by what we have done, and engage in something else with the greater pleasure, no matter whether it be clearing up a meadow, building a new fence, or preparing for the next year's crop.—*Maine Farmer.*

MANAGEMENT OF POULTRY.

A good deal of experience has taught us that success in the poultry-yard depends as much upon good general management as upon any other one thing. When the eggs of any hens indifferently are kept for the purpose of raising young chickens, and when little attention is paid to the particular hens reserved for laying, it will in general be found that the profits are small, and the quality of fowls raised rapidly deteriorates.

In addition to the usual plan of selecting only the best formed and quietest hens for breeding purposes, we have found it of advantage to pay considerable attention to the *age* of the fowls which we retain. For the production of eggs for domestic consumption, we never keep hens beyond their second year, but for raising chickens we have found it to be poor policy to employ eggs laid by hens of less than two years old. We have always found that the chickens from the older hens are more easily raised, have stronger constitutions, and turn out every way better than those raised from eggs laid by very young pullets. At the same time such old hens do not lay as many eggs. The eggs, consequently, cost more, but this extra expense is but a small item on the number of eggs usually employed for hatching.

In order to have eggs during winter, besides the usual appliances of meat, lime, sand, bones, &c., we always make sure of having some very early chickens. The pullets of these will commence to lay in October or November, and will lay throughout the winter. Next season we draft a few of the very best of these and keep them as breeders, the balance being fattened and killed off as soon as they have positively ceased laying. At this time it is wonderful how rapidly hens take on fat. We often see accounts of hens not laying because they are too fat. When considering the ease with which hens fatten as soon as they cease laying for the season, we have often thought that the true way to state the case is that they fattened because they did not lay. At this age they are delightfully tender and juicy, and we would about as soon think of fattening a cow that gave twenty quarts of milk a day as to think of fattening a laying hen.— *Co. Gent.*

TEXAS CATTLE DISEASE.

Large numbers of cattle from Texas have been recently brought into Illinois, Missouri, Indiana, &c., and there is considerable excitement among farmers there in consequence of the disease which they communicate to the other cattle. In Illinois, Missouri, and Kansas there are stringent laws against their introduction into these States, and it appears that the people are determined that these laws shall be enforced, and the further importation of these cattle prevented. The *Chicago Republican* gives the following account of the disease:

This malady is peculiar to this Texas breed. The disease seems to have acquired a home in the constitution of animals bred and reared there, and lurks in them in a latent form until favorable circumstances develop it, when it becomes both contagious and infectious. It is similar in character to the cattle plague of Russia and the rinderpest of England. Animals affected by it become dull, stupid, stiff, separate from the herd, are not inclined to eat, are seized with trembling, cramping, staggering, falling, and the joints become compressed. Some become perfectly blind. The blood becomes very black and thick; the heart is only slightly affected; the lungs appear perfectly sound and healthy; the second stomach is very much contracted, with the fecal matter dry, hard, and compact; the paunch, or first stomach, is almost empty; the bowels are contracted, nearly empty, and extremely costive; the bladder generally contains but a small quantity of thick, highly-colored urine, sometimes discharging a considerable quantity of bloody urine.

The theory of careful observers who have watched to discover the manner in which this disease was communicated so certainly, and with such fatal effect to our own herds, is that our grasses have the effect upon the Texas stock to eliminate the poison through their kidneys and bowels, and perhaps through the lungs, which being doposited in the pasture, is left ready to infect the first herd which follows after them. Our Northern cattle, not being acclimated to the disease, are readily susceptible to the infection of the poison, and suffer accordingly.

THE DAINTIES OF OUR ANCESTORS.

OST of the books on which we depend for our knowledge of the history of the world and of the successive generations of men which have peopled it, give us full details of the march of armies and of the succession of potentates, while the facts which illustrate the history of the common people are meagre indeed. A perusal of portions of a recent book entitled "Our English Homes," has, however, led us to reflect a little upon the contrast between those homes in the fourteenth and fifteenth centuries, and our *American Homes* at the present day, and especially the homes of a large portion of the *farmers* in New England.

It is doubtful whether so many of the necessaries and luxuries of life were even found clustering around any other community of people, as can be found among the middle and northern States of our country. Their dwellings, in the first place, are substantial, tight, commodious, and generally comfortably warmed in cold weather. Usually, the rooms are furnished with a view to the highest degree of utility, and in thousands of instances in nearly all classes, some of them are fitted up with elegance and taste. The stiff, straight-back chairs, with solid wooden bottoms, of a generation scarcely yet passed away, have given place to those which are lighter and of better form to afford rest when sitting down. The old wooden *settle*, six feet long and five high, with a tight back like a board fence, has lost its office. It had a seat which would accommodate five or six grown persons, or half as many more children, and a box under it containing something less than half a cord of wood for a single evening's fire! It was used to protect the family from the cold air constantly rushing in through the cracks in the outer walls of the house, and made ten times more fierce by the heated currents which were ever rushing up the chimney. The huge old fireplace is closed up, and a *cooking stove* stands before it,—one of the greatest blessings yet conferred upon man by science and art.

To this inestimable boon has been added numerous other contrivances which tend to facilitate and alleviate human toil,—such as the sewing and washing machine, the wringer, clothes dryer, mangle, conveniences for all sorts of cooking, lighting and warming, and in thousands of instances the introduction of hot and cold water all over the house. All these tend to health and profit. They promote quiet and calmness of mind, by preventing anxiety and fatigue.

Nearly all the furniture of our houses is well adapted to its uses. Carpets are on the floors of nearly every house, and are heathful and economical. Beds are comfortable, tables abundant and convenient, lounges, bureaus, drawers, closets, and clothes presses, common. The walls are papered, and adorned more or less with paintings or pictures, according to the taste or ability of the occupants. And what is a crowning glory to all these, is the presence of books in nearly every household,—often selected with excellent judgment—and among these, on the centre-table, or in some convenient place, is the HOLY BIBLE.

Among the farmers, and quite often among mechanics and others, there may be added a good horse and comfortable carriage, which may be used for business or for recreation by all the family. Added to these rich and varied blessings we have the most wise and humane laws, the most ample means of education in all the departments of learning, including religious advancement, and all the liberty of speech and conscience that any people can desire. Besides these civil and social blessings, we have the finest climate in the world—all things considered—and a most healthful fertile and beautiful country.

Our tables are spread as bountifully, as our other blessings are abundant, with the products of our own and foreign lands. Surely, our lot is cast in pleasant places. Was there ever a people so favored of heaven before!

Now let us look at some of "*the dainties of our ancestors*," as described in the book on English Homes, to which we have alluded. It says:—

"The whale was eaten by the Saxons; and when men were lucky enough to get it, it appeared at table late in the 15th century. In 1246 Henry III. directed the sheriffs of London to purchase one hundred pieces of whale for his table. Whales

found on the coast were the perquisites of royalty; they were cut up and sent to the king's kitchen carts. Edward II. gave a reward of twenty shillings to three mariners who had caught a whale near London bridge. Those found on the banks of the Thames were claimed by the Lord Mayor, and added to the civic feast. Pieces of whale were often purchased in the thirteenth century for the table of the Countess of Leicester. England was supplied with this choice dainty by the fishermen of Normandy, who made it an article of commerce. The Normans had various ways of cooking it; sometimes it was roasted, and brought to the table on a spit; but the usual way was to boil it and serve it up with peas; epicures looked out for a slice from the tongue or the tail. The grampus, or sea-wolf, was also highly esteemed; but of all the blubber dainties the porpoise was deemed the most savory. The Saxons called it sea-swine, and the ecclesiastics of the middle ages *porco marino*. Porpoises were purchased for the table of Henry III. in 1246."

The questions will naturally arise, Why was society in so rude and unsettled a condition, and why were the necessaries, comforts, and conveniences of life so few? The land was not poor, but capable of sustaining a much larger population than it had, and yet the people were scarcely out of a semi-barbarous condition. No! it was not poor land, or bad seasons, nor even the indisposition of the people to labor on the land, but a "general round of oppression, resulting from ignorance of the proper interests of the productive classes, and a constant contest between capital and labor, each plundering the other, and *both plundered by arbitrary power!*"

In the reign of Henry III. the whole stock of a carpenter's tools was valued at one shilling, and consisted of a broad axe, an adze, a square and spoke-shave! "There were very few chimneys; the fire was laid to the wall, and the smoke issued out at the roof, or door, or window, and the furniture and utensils were of wood. The people slept on straw pallets, with a log of wood for a pillow." Even as late as the time of Elizabeth, 1558, it is stated that apologies were made to visitors if they could not be accommodated in rooms provided with chimneys. They had few glass windows, and when glass was introduced it was for a long time so scarce, that when the people went away they would order the windows taken out and laid up in safety! In the 14th century, none but the clergy wore linen. The household furniture, among the wealthy, consisted of an occasional bed, a brass pot, a brass cup, a gridiron, and a rug or two, and perhaps a towel. Of chairs and tables we hear nothing. Even the nobility sat upon chests in which they kept their clothes. If a man in seven years after marriage could purchase a flock bed, and a sack of chaff to rest his head upon, he thought himself as well lodged as the lord of the town!

In addition to this poverty of what seems to us absolute necessities, the houses and the people were exceedingly dirty. Erasmus, a celebrated scholar of Holland, who visited England, complains that "the nastiness of the people was the cause of the frequent plagues that destroyed them;" and he says their floors are commonly of clay, strewed with rushes, under which lie unmolested a collection of beer, grease, fragments, bones, spittle, excrements of dogs and cats, and of every thing that is nauseous."

Their tables were as miserably supplied as their dwellings. They had little fresh meat, but salted most of their cattle and swine in November, upon which they mostly depended through the winter. Very few vegetables of any kind came upon their tables. It is stated that in the early part of the reign of Henry VIII., not a cabbage, turnip, carrot, or other edible root grew in England!

The average duration of human life was, at that period, not one half as long as at the present day. The constant use of salted meat, and few or no vegetables, contributed to the shortening of life, to say nothing of the large numbers swept away by pestilence and famine.

It was probably in England then, pretty much as it is in Nubia now, where Buckhardt saw a farmer who had been plundered of everything by the pacha, because it came to the knowledge of the savage ruler that the unhappy man was in the habit of eating wheaten bread; and that, he thought, was too great a luxury for a subject!

In relation to the condition of things, Knight says,—in his book entitled *Knowledge is Power*,—"when these iniquities prevailed, and there was neither freedom of industry nor security of property—when capital and labor were not united—when all men consequently worked unprofitably, because they worked without division of labor, accumulation of knowledge, and union of force—there was universal poverty, because there was feeble production."

With us, the difference is, that every per-

son enjoys full liberty to fix his location where he pleases,—provided he can pay for it. He manufactures any articles which he desires to, not protected by patent, or raises any amount of crop that his industry and skill may enable him to. He then sells without restriction of any kind, to those who will pay him the highest price. The government never meddles with him further than to collect the revenues fixed by the legislators whom the people themselves have selected for that purpose. Capital and labor are united, and no power stands behind to wrest them from their legitimate course.

KENTUCKY BLUE-GRASS LAND.

The Lexington *Farmers' Home Journal* is publishing a series of articles, somewhat scientific in their character, upon the causes of the wonderful fertility of the Blue-grass lands of that State, in which, among other facts, it is shown that the limestone on which that soil is based has long been and is still undergoing a slow process of decomposition, from the action of the air and the gases in the soil, by which the fertility of the land is produced and kept up. But is it safe to act on the assumption that this soil is practically inexhaustible? This question is discussed in the eighth paper of the series of articles above alluded to, in the following manner:—

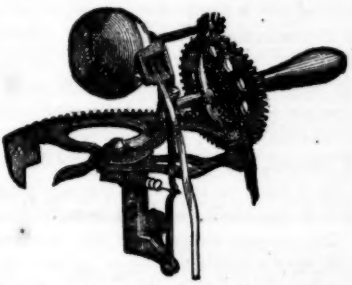
It is a very great calamity to any country when the land becomes unproductive; for it requires no more labor, no more expense for farm implements and stock, &c., to till the rich land than it does to cultivate the poor land, while in the latter case the labor and expense are measurably thrown away, because not remunerative. It is, therefore, very easily to be demonstrated that it is poor farming to reduce the productiveness of any land, however rich it may naturally be.

The blue-grass farmer has too frequently lost sight of these agricultural axioms; and, relying on the natural fertility of his soil, indulged in a scornful kind of pity toward the more skilful farmer of poorer regions, who annually increases the productiveness of his fields by attention to the science of agriculture, and the use of artificial fertilizers. Relying on the large store of the elements of fertility in his rich land, and upon its natural process of renovation by the influence of the limestone sub-stratum, the blue-grass farmer cares nothing for the "phosphates," the "alkalies," the essential mineral ingredients of the soil—"he cares only for the crops," which kind nature gives him, for the simplest and blindest labor. Like the prodigal son of a rich father, his wealth has come to him without any exertion of his own, and he cannot, therefore fully appreciate its value.

But the largest fortunes have been known to become exhausted, and even rich heirs have at length been brought to know how very inconvenient poverty may be. All heirs of rich fathers have not shown so little consideration, but employing their natural faculties have used and preserved their capital for the benefit of themselves and their posterity. And this line of conduct is more especially the duty of the blue-grass farmer.

It is pretty well known to all that the natural process of the renovation of this soil does not keep pace with the exhaustion of modern farming; and as markets become better, this exhaustion will be more rapid; and it is evident to all good observers that this land is gradually becoming less productive. Many may be disposed to dispute this, who do not severely crop their land, or who use it mainly for grazing. But where do we now see that enormous productiveness which was enjoyed by the pioneer blue-grass farmer, in former times? The process of exhaustion may be slow, but, like the motion of the hour hand upon the face of the clock, time demonstrates its progress. It is wise to begin in time, to take this important matter into serious consideration, that we may check the impending evil before it becomes a public calamity.

THE LIGHTNING APPLE PARER.



The Gold Medal of the New England Agricultural Society was awarded last week to the machine represented by the above cut. It also received the highest premium at the Paris Exposition, as it has likewise, we are informed, at every State, County, and Town Fair where it has been exhibited, without a single exception. It does its work with an ease and expedition that justifies its name. There is no crank to turn,—a simple horizontal movement of the handle strips off the apple's jacket, and places the knife entirely out of the way while taking off and putting on the apples. It appears to be durable, is well made, entirely of iron, and so constructed that the most careless operator cannot bring the knife in contact with the fork. When seen in the picture the little machine, we think, appears more complicated than when in actual operation. Its simplicity is in fact one of its highest recommendations. One of these machines has been in use in our family during the year past and has given entire satisfaction. It is for sale at the principal agricultural and hardware stores in the country.

AGRICULTURAL RHYMES.

When books and papers were scarce, people read to remember, and rhyme was a great assistance to the memory. Thus many of the sayings of Franklin's Poor Richard have been handed down from father to son, and are still household words among us. The following collection was made by Dr. J. C. V. Smith, formerly of Boston, and published in the *New York Tribune*:—

If butter churned in morning air
Is kept in a cool place with care,
The taste is nice;
But that which shows the buttermilk
Don't sell to those who dress in silk—
For any price.

To be in debt
Brings out the sweat.
No half-cooked meat
Is fit to eat.

A woman who sneezes
Ought not to make cheeses;
Put her hands in a muff,
Or ever take snuff.

When the wind is east and turkies gobble,
It is no time a horse to hobble;
But let him range to catch the breeze—
Should he be troubled with the heaves,

An ox with broad horns and short glossy hair,
Is good for a team, the market, or fair.

One white foot is bad, and two are too many,
That horse is best that does not have any.

A farmer without hogs,
But an army of dogs,
Will have more puppies than pork;
For the swill will be lost,
To the husbandman's cost,—
Dogs good for nothing to work.

The slackest farmer, strange to say,
Is known for being out of hay.

It does not pay in any way,
To milk a cow three times a day.

When chickens roost above the mow,
It spoils the hay for horse or cow.

The well-bred daughter for a farmer,
A prudent helpmeet and a charmer.

It is no place to set poles,
Where moles or mice have dug their holes.

Cobs make no food for kine to eat,
But they are good for smoking meat.

Pork and beans make muscles strong—
Something farmers seek;
It is a dish to make life long,
When cooked but once a week.

A slovenly dress, a shabby pate,
The fences down, a broken gate,
Pigs in the garden, weeds very high,
Children unwashed—no bacon to fry—
Lots of great dogs and yawling tom cats,
Windows repaired with a dozen old hats,
An empty barn—not a spear of hay,
Cows in the clover, horse run away,
Things sold by guess without being weighed,
Bills coming in and taxes unpaid—
Pipes and tobacco—whisky—neglect,
Drag in their train, as all might expect,
All sorts of trouble to fret away life—
But worst of the whole, an unhappy wife.

Many estates are lost in the getting,
Since men have forsaken hewing and splitting,
And woman their sewing and knitting.

A mackerel sky—
The wind will be high,
Then bring in the grain,
Close by there is rain.

A smoky chimney may be cured,
A scolding woman not endured,
A farmer's wife, like cream or curd—
Is to be seen but seldom heard.

If you would thrive,
Be up by five;
For there is health
And certain wealth,
When at the plough,
Or milking cow.

A farmer at home should be found,
And often looking at his ground—
Inspecting fields, repairing fence—
For dollars come by saving pence.

Clear the soil from moles and slugs,
Prune the trees—keep off the bugs,
Then fruits and melons, rich and fair,
Will recompense for all your care.

Rutabaga, carrots, and beets,
Improve the character of meats;
They make good beef, and quicker too,
Than any other feed will do.

At the farmer's cost
Is an early frost.
Exercise reason—
Harvest in season.

Of all the crops a farmer raises,
Or capital employs,
None brings such comforts and such praises,
As a crop of girls and boys.

For the New England Farmer.

MANURES.

My attention was early directed to the importance of composting and sheltering manure by two circumstances. First, by hearing old Revolutionary soldiers tell of making saltpeter by leaching the earth taken from under old stables. If such dirt held the strength of manure in this way, why should not all manure be treated in a similar manner? In the second place, while residing in Woodstock, Vt., in 1825, when farming was at a low ebb, a Mr. Bingham removed into that town from Bethel, and purchased a badly run down farm. I remember of hearing him remark, in conversation with a neighbor, that he was going to raise wheat. This neighbor replied, you cannot raise wheat in Woodstock, if you did in Bethel. But Mr. B. did raise wheat in Woodstock, as did also his neighbors who adopted his mode of cultivation and management of manure. He saved not only the solids, but the liquids, and composted and cured it carefully in a dry cellar, and thus not only raised wheat, but more than tripled the other products of the farm in a few years.

Two-headed Calf.—Corn Cobs.

Since writing the foregoing, I have been called to assist a neighbor to remove a two-headed calf from one of his cows, which had been down since the day before. The calf had two distinct nostrils, four eyes, two skulls and three ears. The cow was left very weak and low. One of the assisstants recommended

the owner to make a tea of white pine boughs, while I told him to boil corn cobs, and give her the broth. He gave her both, and the cow got along nicely.

And this brings me to the much mooted question of the value of corn cobs. If you have to pay toll for grinding them, they may not pay. But they may be used more economically. I once knew a widow lady who was remarkable for the good condition and fine appearance of her cattle, and for the small amount of hay she used in wintering them. She boiled all the cobs she could collect, and gave the tea or broth to her two cows and to her weak or sick sheep and lambs. In case of sickness, her favorite medicine was Harlem Oil, or Medicamentum. So successful was she that the neighbors used to say that she would take a dead lamb, and after bringing it to life, it would start off bleating, "Medicamentum and corn cobs cured me."

I once tried the experiment by boiling three times a day a pailful of cobs, sprinkling on a little salt, and about two tablespoonfuls of meal to each painful of cobs, and gave them to the cow warm. With the cobs and 1400 pounds of bushy hay during the winter, she came out fat enough for beef. For sick cows or sheep, I do not know of anything better than the broth of cobs to give them a start.

Red Water.

If I had a creature troubled with Red Water, I should give it cob broth and white pine tea.

Sick Hogs.

I agree with Mr. Whatmore that chamber lye is good for a hog, especially when applied as a wash, but sour buttermilk is better. For a sick hog, pulverized blood-root is a good remedy, given freely; also garget or poke root.

Grub, or Dung Worm.

How shall we get rid of the grub or dung worm? I am trying an experiment by saturating my manure heap with gas water. I am of the opinion that enough of this runs into the Merrimac river to kill all the worms for five miles, on both sides, below Manchester.

Banking up Apple Trees.

I have been banking up apple trees with good results. I have one that came up in the bottom of a potato hole, that I am filling up gradually, and it grows vigorously.

NORMAN CALL.

Allenstown, N. H., 1868.

CHERRY POISON.—On last Saturday, says the *Intelligencer*, published at Horse Cave, Mo., while Mr. F. M. Richie, who lives eight miles from our town, was ploughing near a wild cherry tree that stood by a cross fence, some of the limbs of which were in his way, he trimmed off a mere armful and dropped them across the fence into the pasture of Mr. B. F. Thompson, in which was one of his fine milch cows, and also one belonging to Mr. James Bishop. On Sunday morning these two cows found the cherry limbs and eat the leaves off them, and in less than half an hour, or before they had walked twenty steps from the limbs, they both died.

AGRICULTURAL LABOR.

After alluding to the auspicious opening of the exhibition of the New England Agricultural Society at New Haven, and to former expressions of his views on various agricultural subjects, the president, Dr. Loring, in his address, spoke as follows:—

The application of labor in its various branches constitutes, in reality, the wealth of a nation. Nature presents her riches for man's necessity, comfort and enjoyment; and only asks him to use his industry and skill for the utilization of what she so bountifully bestows. Mines and forests and virgin soils all wait for his vitalizing hand. It is labor in all its diverse channels which domesticates the untamed products, bringing their ores and minerals forth from their gloomy beds into all service of grace and use and beauty,—converting the forests into cheerful and splendid abodes, and making "the desert blossom like the rose." Subservient labor here, free and enlightened labor there, gives to each sphere in which it is employed, character and thought, and social and civil condition. With us it is the application of independent and aspiring labor, which forms the most important problem now occupying the best thought of the times. Subservient, exhausted, ignorant, wearied labor cannot, in this country, be longer profitable or useful. Whether applied to manufactures, or the mechanic arts, or agriculture, it must now perform the largest amount of work in the shortest space of time, to be accordant with the necessities of this era. Slow, toilsome, tedious effort in the business of converting the raw material into articles of use and beauty cannot be profitable to either the employer or the employed. It is rapid and economical production by machinery which enables us to compete with other countries where labor is cheaper than in our own; and it is the skilful use of machinery here which enables the laborer to accomplish his task, with the assurance of an ample reward, and of leisure sufficient to give rest to his mental and physical faculties. A half century ago hard labor accomplished in many hours what is now performed in fewer minutes. And as the pecuniary necessities of the laborer have increased, so have his opportunities for a more ample compensation been increased by placing in his hands well-constructed and ingenious ma-

chinery of every description. It is by the exercise of mechanical ingenuity that intelligent labor in this country has been furnished with an opportunity to be well requited, and to compete with ruder forms elsewhere. And in the same way may the toiling masses find time for that rest and mental culture which a free people demand, without interfering with that industrial production upon which the prosperity of a nation depends.

It is true that this same ingenuity has been applied in a very considerable degree to agriculture. The application of mechanical forees to the business of the farm forms one of the most interesting of modern problems, and is rapidly advancing toward a great degree of perfection. But we have not yet reached that point at which the slow, and tedious, and wearisome processes of agricultural labor in many branches can be avoided. The hardest toil is on our farms. The production of a crop by hand labor is expensive and primitive. The work of disintegrating the soil with the plough is slow, and by no means in accordance with this age of steam and machinery. I never see an army of young men pursuing their recumbent way through a root crop, without wondering when we shall be able to substitute a simple machine for that slow multitude of fingers. We cannot hope to be just to agricultural labor, or to ourselves, as farmers, until we apply such machinery to the land, that one well chosen hour will bring forth what is now performed in two; and agricultural labor shall enjoy with every other branch of industry all the ameliorating influences which occupy so much of the thought of the present age.

It should be remembered that as a nation we have emerged from that subservient form of labor, which has been profitably applied in every age and in most great agricultural countries to the production of the staples for the commercial markets. It is now free labor, carrying with it the ownership of the soil, which is to be employed and provided for. And it is agricultnral labor which occupies a very large proportion of the citizens of our republic. It is in the land, and in the capital employed in managing it, that the largest portion of our wealth is to be found.

In New England alone the value of the farms is estimated to be $474,305,853. The value of the implements used on these farms is $16,466,614. The value of the live stock is $68,695,015. Making an aggregate of 559,470,482. The capital invested in manu factures in New England, according to the latest returns, is $257,477,783, less than half that invested in agriculture. I have been unable to ascertain the number of persons employed in labor on the land in any of the New England States, except Massachusetts, but in that State alone nearly seventy thousand laborers are occupied in tilling the soil. That the vast amount of capital invested in agriculture is managed to the best advantage, and that the labor employed in this industry is most profitably applied, no one can for a moment suppose. Consider, then, what a problem this is. How shall the labor used in this great interest be most thoroughly exercised, with entire regard to the best interests of all classes of society. That the investment of five hundred and fifty millions in agriculture may be made a good one, the experience of every prosperous farmer will bear witness, and it only requires a general understanding of the best use of labor to make the prosperity more general. We should remember, moreover, that the owners of the farms in New England are in many instances the actual laborers on the land. For these men, upon whose sound bodies and well-informed minds the coming generations depend for their inheritance of healthy and useful faculties, let every effort be made to ameliorate the condition and increase the profit and the well being of agricultural labor.

High Farming.

As a natural consequence of the more extended use of machinery in all branches of agriculture, will follow that more thorough and careful cultivation, which I have often urged as the only profitable farming known among us. Wherever farming in New England is to be done at all, it must be done well. A ton of hay to the acre, and thirty bushels of corn, and twenty bushels of rye, and fifteen bushels of wheat, and two or three hundred bushels of roots, are not the crops that can be called remunerative here. It cannot be profitable to feed a worthless animal six months in every year out of the store of hay secured at the cost prevailing among us. These facts are not to be lost sight of. And I am confident that I state what is true, when I assert that in these points a constant and steady improvement is going on. The number of well cultivated acres is increasing. In the cultivation of garden vegetables for market, in the production of grass, and small fruits, and root crops, we are making constant progress. Farmers who, ten years ago, thought it impossible to raise a mangel or a Swede, now follow successfully these roots. Where there was one herd of well-bred cattle there are now many. And I have witnessed with pride and satisfaction the devotion of practical farmers to the improvement of stock, and to the purchase of animals which, a few years ago, were looked upon as the special property of those who turned to farming more as an extensive pleasure than as a profitable occupation.

Tomatoes for Garget. — A correspondent in Maine recommends tomatoes as a cure for garget in cows, and also says that he finds a peck of them fed to a healthy milch cow as beneficial as the same amount of potatoes. Have others had experience in this matter?

A CATTLE SHOW IN SCOTLAND.—The exhibition of the Highland Society, which is regarded as the parent of all British agricultural societies, having been established by Royal Charter in 1787, was held this season in Aberdeen the first week in August. By a report in the *Canada Farmer* we learn that the grand total of animals on exhibition was 1681; consisting of horses 139, sheep 632, swine 57, poultry 480. There were 1158 machines, implements, &c. The number of entries at Aberdeen was considerably reduced by an unfortunate misunderstanding between exhibitors in the vicinity of Glasgow and the railway managers, which resulted in an opposition show at the latter place, which offered premiums of equal value to those of the old society. Although there is no allusion to "trials of speed," the receipts at the gate were about $8000, and the amount of prizes offered a little larger than the receipts.

GOOD SEED.—We find in the *Iowa Homestead* a statement by Sewell Foster, Esq., of the production of two parts of the same field of wheat this season, both of which were prepared alike, and treated in the same manner with the exception of the seed. On one portion very clean, plump, nice wheat, costing $2.25 per bushel, was used; on the other ordinary wheat worth $1.75 to 1.80 per bushel was sown. The good seed averaged 23½ bushels per acre; the poorer 18½ bushels per acre.

NATURE AND USES OF PLASTER.

The question is often asked among farmers; of what use is plaster? When, where, and how shall it be used? And I have never heard a satisfactory answer given to them Nearly every farmer who had made any application of plaster, had found it serviceable at one time, but without profitable returns at another. No one within my acquaintance knows the reason for success or failure.

Most people found the application to clover attended generally with good results; some found it good sometimes for potatoes; but not a single one could tell, What is plaster good for? Chemistry solves the question: Plaster is sulphate of lime. To different branches of science it is known by different names. In the arts it is plaster; in mineralogy it is gypsum; in chemistry it is sulphate of lime. It is sulphuric acid and lime. Sulphuric acid has an affinity for ammonia, and when it finds ammonia it breaks up its partnership with the lime and combines with the ammonia, forming sulphate of ammonia, and this is non-volatile. The lime finds a companion, when deserted by the acid, in carbonic acid, forming carbonate of lime.

Hence it will be seen that when the farmer has ammonia in his soil, put there by himself in manure, or in any other manner, liable to waste, the plaster will fix it there, and in all such cases it can be applied to the ground with profit. The odor about stables and manure heaps, is escaping ammonia, and the farmer can judiciously use a little plaster in both places, saving the ammonia for his land.

Plaster saves to the soil nitrogen, one of the chief mineral elements entering into the growth of plants; ammonia is three parts hydrogen and one part nitrogen. Ammonia escapes from decaying vegetation wherever it is found, and is suspended in the air, and when after a long dry spell and considerable quantities of it has ascended, the first rain brings it to the earth, and if there is a little plaster in the clover field, the ammonia never rises again.

This very study into the uses of plaster shows that the farmer should be a student, and in some degree, a man of science. He must learn that in doctoring his soil something else than mineral substances may be needed. He may need organic substances as well, and to know this is the duty of the farmer. But I trust I have explained the nature and uses of plaster, so that whoever reads may know when its application may be serviceable.—*Ohio Farmer.*

WEANING LAMBS.

Lambs should be taken from the ewes before feed begins to fail in the fall; they require, when left to get their living by grazing alone, good pasture, or they will decline in flesh and and enter winter in a condition that will not warrant their going through. The ewe also after supporting a lamb through the summer, requires time and plenty of food to recuperate lost strength and flesh. Sheep lay on flesh more readily from grass in the months of October and November than any others, and lambs should be taken off as soon as September, or at least as soon as they are four months old.

The two flocks should be separated if possible so far that they cannot hear the bleating of each other, and by all means so that they are not in fields adjoining, for they will spend one-half of the time running up and down the fences trying to get together. If lambs cannot be furnished with good pasturage, they should have a little oat meal once a day; a gill to each is sufficient, and less than that amount should be given at first.

If docking was neglected at the proper time, do not do it when weaning; the lambs have enough to endure by the separation from their mothers; nor should the job be attended to until grass has a good start in the spring.—*Ohio Farmer.*

Ladies' Department.

From the German.

THE STOCKING KNITTER.

She stood beside the window, at her knitting worked the maid;
It was homely work—you'll laugh at all my fancies I'm afraid.
But when her work was ended, and she laid her knitting down,
With a thoughtful face she gazed upon the stocking ribbed and brown.
Thus she pondered—"If each loop of this my knitting was a thought,
And each worsted-strand a fancy, what strange lessons would be taught
For the future from my knitting? as I con it o'er again,
For the secrets of the future from the tangles of the skein.
There are woven dreams in knitting, and there's many a girl will look,
To the clicking of her needles, on her knitting as a book.
As they rattle on so gaily, I am blithe and of good cheer,
And anon a loop has fallen—and I wipe away a tear.
With the snapping thread how often has my darling left in pain;
As I join the yarn, in fancy he has come to kiss again.
All the loops are chains of thought, some bright as sunrise on the wave,
And while some brought balm to sorrow, some were darksome as the grave.
All the strange tales of my childhood they came back to me once more,
The old rhymes of gnome and fairy, and the spectre shapes of yore;
With the knots that I unravelled all those fearsome nights were fled,
They were swept into oblivion at the smoothing of the thread.
And I felt my heart was breaking as my needle snapt in twain—
'Twas an omen for the future of disaster, doubt, and pain.
And I heard again in fancy all the tender words and vows
That I heard from gallant lovers with the rose-flush on my brows;
They were sweet words of devotion, and my heart was very proud,
And they came from out my knitting, where they slept as in a shroud.'
As the lithe, small hands were idle, so the maiden, to my mind,
Thought and spoke. In work most homely poet-fancies you will find.

DOMESTIC ECONOMY;

OR,

HOW TO MAKE HOME PLEASANT.

BY ANNE G. HALE.

[Entered according to Act of Congress, in the year 1856, by R. P. Eaton & Co., in the Clerk's Office of the District Court for the District of Massachusetts.]

CHAPTER XIV. CONTINUED.

FOOD AND ITS PREPARATION.

Rye drop cakes are an excellent and healthy bread for breakfast. Here is a simple rule: Beat three eggs very light, add one quart of milk, a large pinch of salt, stir in a handful of flour; then rye till the mixture is stiff enough to hold up the spoon; pour it into a French roll pan, or into muffin rings, and bake fifteen minutes. For muffins, take one egg well beaten, a piece of butter an inch square, one cup of milk, one tablespoonful of sugar, one teaspoonful of soda, and two of cream of tartar; stir in flour till it is a stiff batter; pour it into rings,—or into a flat pan for a broad loaf, which when baked should be cut into squares. A good rule for Indian or corn bread is the following: three eggs well beaten, one quart of sour milk, a piece of butter the size of an egg, two tea spoonfuls of saleratus; mix them well, then stir in three tablespoonfuls of flour and Indian meal enough to make it a stiff batter. Bake it in a flat pan half an hour.

For buckwheats take a quart of warm water, one quarter of a yeast cake, and a little salt. Stir in buckwheat flour—making it a thin batter. Let it set by the stove over night; in the morning stir in half a teaspoonful of soda or saleratus. Make them of milk if you have it. Using a teaspoonful of saleratus and the same of cream of tartar, the yeast can be omitted, and the mixture fried immediately. Consume as little fat as possible in frying them. For this a swab, made of a bit of clean white cloth tied to a clean meat peg, with which the fat can be applied to the griddle, is very convenient. Leave a gill of the batter as yeast for the next set of cakes. Nice griddle cakes may be made in the same way of rye and Indian meal, or of Indian and flour.

While there is such a demand for cake and pastry there must be receipts for making them. I have no space for these, but give general directions and suggestions for the making and baking of pies and cakes. When preparing for pastry allow a heaping handful of flour for each pie that you intend to make. Sift it, and set it in a cold place till you wish to use it, sometime beforehand. Get your plates buttered and the filling materials ready. Then, to three handfuls of flour allow two heaping tablespoonfuls of lard; half of this may be of butter, or of soft, new, beef fat which has been clarified by boiling in water. Rub one-third of this shortening into the flour—together with salt—a small pinch for each pie; rub lightly—mix a very little saleratus—a piece the size of a white bean is sufficient for two pies—in cold water or milk, with which wet the flour; stir it up as quickly as you can—just get it together so that you can roll it—don't mould it; take it on the moulding board with a sprinkling of flour for both board and pin. Roll it to the quarter of an inch in thickness, spread shortening over it as evenly as you can; sprinkle flour from the dredging-box upon it, and fold it into a long roll; flatten it a little with the pin, spread more shortening, sprinkle again with flour, and roll or fold it closely together. Cut a slice from this; roll it as nearly as possible to a round shape, fold it across the centre, to lift it to the plate easily, spread open, see that it lies closely to the plate or dish; then take the dish or plate on the palm of the left hand, and, holding a knife in your right, just under the edge of the plate, trim off the pastry close and neatly; lay a row of the narrow strip of pastry thus made along the edge, to make

a handsome rim, and if berries or any other juicy substance forms the filling, two layers. Place your filling to meet this rim, wet the rim with cold water and sprinkle flour upon it, (this should also be done to the under crust before placing the rim) then cover with the top crust, (laying it folded across the centre and then opening it) flatten it around the edge with the palms of your hands, and trim it as the under crust was trimmed; prick it eight or ten times with a fork, or the syrup will burst the edge of the crust—as there must be some vent for the steam.

Pastry looks much nicer if made in a cold room, —the shortening must be kept cold till it is all used if it is mixed in a warm room. Pies made of cooked material, such as cranberry, gooseberry, and stewed apple—mince-meat for pies, after it is ready to bake, should be stewed—need an oven nearly as hot as that for baking bread; half an hour, or forty minutes, will generally bake them; they are done when they slip easily in the plate. Raw apples, rhubarb, peaches, cherries, and berries, require as much heat as for baking bread, and from three-quarters' to an hour's time. Custard, squash, pumpkin, and rice pies, should not be filled till just as they are placed in the oven; and the material should then be *hot*, having been heated to a scalding point by placing it in a tin pail or kettle and this being set in the hot water of the boiler over the fire. Stewed fruit pies look best if cross-barred or covered with rings made of narrow strips of pastry, instead of being covered closely. Cream, either sweet or sour—the sour corrected with saleratus—makes nice and healthful pastry. Take the cream and stir in flour enough to handle it easily, add a little salt, mould just to get it into shape, and roll it out immediately for the pie—it is very easily and quickly made.

When you have cake to make, get all the ingredients ready for use and place them close at hand. The currants for fruit-cake should be washed in warm water the day before. Rub them in the water thoroughly, but lightly, and then pour it off; give them two or three such washings, till the water is clear. Drain them in a coarse cloth; then spread them on a dry cloth and rub them dry with it; at the same time pick out the bad ones. Then set them by the fire, or in the sun, to dry thoroughly. Raisins, unless they are very fresh, should also be washed in the same way. Chop them, or cut them with sharp scissors, to stone them. Good brown sugar is best for fruit cake or common cup cake, but crushed white sugar should be used for nice white cake,—the granulated, if pounded and sifted, will answer. All sugar is better *pounded* and then sifted, than if rolled. Fresh eggs are needed for nice cake. All eggs before beating should lie in cold water sometime—over night if they can—they then make a finer froth. Use a wire beater, or a clean, long cork stuck crosswise of the tines of a fork. For nice cake the whites and yolks must be beaten separately. Make a small hole at each end of the egg and either drain the white through one, or by blowing at the other end force it through; be sure that not an atom of the yolk passes with it, it would prevent its foaming well. Beat the whites in a flat dish till you can turn the dish any way without their spilling—till they are light and white as snow. Keep up a steady movement with the beater, and never leave off for an instant; if it returns to a liquid state the foam will not rise well, and your cake will be heavy; by keeping your right elbow close to your side, resting on the hip, the beating will not be very tiresome. It can generally be accomplished in twenty minutes. It is a good plan to have some one beating the yolks at the same time. In summer go into the coldest place you can to beat eggs.

To mix the cake; add first the sugar to the whites, slowly and carefully; then the yolks, and then the flour—for sponge cake. For other kinds, beat the sugar and butter together till they seem like cream, then add the whites; next, the yolks; if cream of tartar is used sift it with the flour and follow with this; then the spice, or flavoring extract; then the soda or saleratus, dissolved in the milk or cream. Put it into well-buttered pans. For very nice cake cut clean white papers and line the pan with them, and set it immediately into the oven; if fruit is used stir it in lightly, just below the surface, at the last moment.

Never use strong or rancid butter or lard, for cake. One half lard is better than all butter. Use a wooden spoon for mixing cake, and a wooden or earthen dish. For cookies and sugar gingerbread, rub the shortening into the flour; beat the eggs and sugar together, then stir in the milk with the saleratus, and then the shortened flour. In rolling it out, shake flour on your hands and rub the board and pin with them just enough to prevent the dough from sticking. For making molasses gingerbread: boil the molasses a few minutes, then dissolve the lard in it, and when at blood heat add the other ingredients, and stir in the flour. Gingerbread and cookies need a quick heat,—will bake in eight to twelve minutes, according to their thickness. Light cake needs a good, steady heat, about the same as for bread. Do not open the oven door after the cake is set in, for ten minutes, and then be sure that no cold draught can reach the oven; glance in carefully, and if the cake is browning too much, cover it with a clean paper. Don't open it again till you think the cake is done, as the admission of cool air will make it "fall," and cause a heavy streak through it. Cake in pans one inch deep will be done in twenty minutes —sponge cake in fifteen—if the oven is of the right heat. Before removing it from the oven try it with a broom-straw to see if it is done. When done it should stand in the pans fifteen minutes, then remove it carefully to flat dishes. If cake is to be frosted set it on a flat tin at this time.

To make frosting: take the whites of five eggs beaten to a stiff froth, put to it a pound of sugar, flavor it with lemon or rose, and beat it steadily—

it will take a great while—from one to two hours,—till it will stay where it is put. Some persons mix a teaspoonful of starch and scald it with milk and add this when cold to the egg and sugar,—with this, less time is required to beat it. Spread the frosting with a knife neatly upon the cake, and set it into the oven for fifteen minutes; it should have only a moderate heat. For very rich fruit cake, or for wedding cake, the oven, if of brick, should be slowly heated with hard wood, and the fire allowed to die nearly out before the ashes are removed. A stove should have a steady hot fire three hours before setting in the cake, and the heat be kept up for three more, when the cake will probably be done. Don't look at it until it has been in the oven twenty minutes, (beware of a cold draught) if it browns too much cover it with paper. In fifteen minutes more if the paper is deeply scorched set a pan of cold water in the oven. Don't look at it again till it is nearly time for it to be done.

In making doughnuts, or fried cakes of any kind, and fried pies, use as little soda or saleratus as possible; as this makes them absorb the fat. Fry them in equal portions of lard and beef fat. Nuts raised with yeast are less liable to do this; and pastry for fried pies made of bread dough with a little sugar and a trifle of lard worked in is preferable in this respect to any other kind; it is always nice and light.

Prof. Horsford's baking powders, being preparations of soda and tartaric acid, are getting into use, and deservedly so, as there is so little dependence to be placed upon cream of tartar and soda even when they are bought at the druggists'.

DOMESTIC RECEIPTS.

Fish Chowder.—The best fish for chowder are haddock and striped bass. Cut the fish in pieces an inch thick and two inches square; take six or eight slices of salt pork; put them in the bottom of an iron pot, and fry them till crisped. Take out the pork, leaving the fat; chop the pork fine. Put in the pot a layer of fish, layer of split crackers, some of the chopped pork, a little black and red pepper, a little chopped onion, then another layer of fish, split crackers and seasoning. This do till you have used your fish. Then just cover the fish with water, and stew slowly till it is tender; thicken the gravy with pounded cracker; add catsup if you like. Boil up the gravy once, and pour over the fish; squeeze in the juice of a lemon. Add salt if necessary.

To Preserve Ripe Cucumbers.—Take large yellow cucumbers, pare them, take out the cores, and soak in salt water two days. Then take them from the brine, pour over them boiling water, and let them stand over night. Pour off this water, and they are ready for the pickle, which prepare thus: For each quart of sharp vinegar take one pint of hot water, two large cups of sugar, and one tablespoonful of each of the following spices: cinnamon, cloves, allspice, black pepper, mace or nutmeg. Add one handful of raisins or ripe grapes. Scald all together, and boil until the cucumbers are easily penetrated with a fork. Use as little of the vinegar to boil them in as possible, and pour the rest over them when done.

A Cheap Ice Pitcher.—The following is a simple method of keeping ice water for a long time in a common pitcher: Place between two sheets of paper (newspaper will answer, thick brown is better) a layer of cotton batting about half an inch in thickness, fasten the ends of paper and batting together, forming a circle, then sew or paste a crown over one end, making a box the shape of a stovepipe hat, minus the rim. Place this over an ordinary pitcher filled with ice water, making it deep enough to rest on the table, so as to exclude the air, and the reader will be astonished at the length of time his ice will keep and the water remain cold after the ice is melted.

Rusks.—Delicious rusks, either for serving with cheese, or for sopping in beef tea for invalids, may be made in this simple way: Cut a round of loaf baked in a tin in eight three cornered pieces, and put them on a plate in cool oven. When one side is light brown, turn. These rusks are more wholesome for infants' food, when soaked in scalding milk, than the usual bread and milk.